

## EXHIBIT F

*Excerpts from the Depositions of:*  
Mark P. Clemons, M.D., Helen Lovelace, Babu Rao Paidipalli, Daniel  
Lovelace, Kelly Kish

\*

Exhibit 4 to the Deposition of Kelly Kish, Paragraph 6

\*

Anesth Analg 2012: 115:102-115, "Can We Make Post-Operative  
Patient Hand-Overs Safer? A Systematic Review of the Literature"

\*

A.S.A. Guidelines for Patient Care in Anesthesiology (October 19,  
2011) in III, Guidelines for Anesthesia Care

\*

American Society of Anesthesiologists Guidelines for Expert Witness  
Qualifications and Testimony (A.S.A., October 16, 2013)

\*

Reedy v. CSX Transp., Inc., 2007 WL 1469047, \*3  
(W.D. Pa. May 18, 2007)

\*

Jackson v. City of Pittsburg, 2010 WL 32221378 (W.D. Pa. 2010)

IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF TENNESSEE

DANIEL LOVELACE AND )  
HELEN LOVELACE, )  
INDIVIDUALLY AND AS )  
PARENTS OF BRETT )  
LOVELACE, DECEASED, )

Plaintiffs, )  
VS. )

2:13-CV-02289dkv

PEDIATRIC )  
ANESTHESIOLOGIST, P. )  
A. BABU RAO )  
PAIDIPALLI, AND MARK )  
P. CLEMONS, )

Defendants. )

DEPOSITION

OF

MARK CLEMONS, M.D.

February 6, 2014

**ORIGINAL**

MID-SOUTH REPORTING  
Pepper Glenn, CCR  
P. O. Box 609  
Southaven, Mississippi 38671  
(901) 525-1022

1 when we -- after we leave.

2 Q. Do you agree with me that when you  
3 last parted company with Brett Lovelace, that he  
4 was not, quote, fully awake when you last saw  
5 him?

6 A. Right. He was not fully awake.

7 Q. Okay. And that prior to that time in  
8 the OR when he was extubated, he was not fully  
9 awake either?

10 A. No, not awake in the sense that we  
11 use -- the layman would use the term "awake."

12 Q. Okay. You never discussed sedative  
13 options with Dr. Paidipalli?

14 A. I don't tell him how to do his job.

15 Q. Did you know that it was wise to let  
16 sleep apnea patients remain in the ICU as a  
17 precaution to an airway issue?

18 A. Sleep apnea patients rarely go to the  
19 ICU.

20 Q. Really? You mean you rarely send them  
21 there?

22 A. In the 30 years I have been doing  
23 this, I can't remember one sleep apnea patient  
24 that we sent to the ICU who woke up -- who woke

1 IN THE UNITED STATES DISTRICT COURT  
2 FOR THE WESTERN DISTRICT OF TENNESSEE

---

3 DANIEL LOVELACE and  
4 HELEN LOVELACE, Individually,  
5 and as Parents of BRETT LOVELACE,  
6 deceased,

7 Plaintiff,

8 Vs. NO.2:13-cv-02289-JPM-dkv

9 PEDIATRIC ANESTHESIOLOGISTS, P.A.;  
10 BABU RAO PAIDIPALLI; and MARK P.  
11 CLEMONS, MD.

12 Defendants.

---

13 THE DEPOSITION OF HELEN LOVELACE  
14 January 15, 2014

15 VIDEO DEPOSITION

16  
17  
18  
19  
20  
21  
22  
23 Madelyn E. Gray  
24 Court Reporter  
Suite 303, 22 N. Second Street  
Memphis, Tennessee 38103  
(901) 527-1100

 COPY

1 walked into PACU with Dr. Clemons.

2 Q. Okay.

3 A. That's the first time I had saw her.

4 Q. All right. But did she say, when you  
5 were in PACU, that he had rolled over on his  
6 stomach on the way from the OR to PACU?

7 A. Yes. When Dr. Clemons asked me about  
8 Brett being, if he slept on his stomach.

9 Q. Okay.

10 A. That's when Nurse Kish told Dr. Clemons  
11 and I that that's when he had rolled over.

12 Q. Okay. Was there anymore discussion among  
13 the three or four of you about sleeping on his  
14 stomach?

15 A. No.

16 Q. What was Brett's -- I mean, was he awake  
17 at all, partially awake, groggy, out of it?

18 A. He was not awake at all.

19 Q. Okay. And was he ever awake at all  
20 during --

21 A. No.

22 Q. Let me finish.

23 A. He was never awake from the time I walked  
24 into PACU until I left on Thursday without my

IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF TENNESSEE

DANIEL LOVELACE AND HELEN )  
LOVELACE, Individually, and )  
as Parents of BRETT LOVELACE, )  
Deceased )

Plaintiff, )

VS. ) NO. 2:13-cv-02289 dkv

PEDIATRIC ANESTHESIOLOGISTS, )  
PA; BABU RAO PAIDIPALLI and )  
MARK P. CLEMONS , )

Defendants. )

DEPOSITION OF BABU RAO PAIDIPALLI, M.D.

January 9, 2014

MIDSOUTH REPORTING SERVICE

LU ANNE R. DUDLEY, CSR, LCR #349  
P.O. BOX 1631  
CORDOVA, TENNESSEE 38088  
(901) 525-1022

1 A I'm in the operating room area.

2 Q You were in the operating room?

3 A Uh-huh.

4 Q Were you actually involved in handling an  
5 operation?

6 A No.

7 Q You were just there?

8 A No. I was just in the hallway.

9 Q Okay. Okay. Now following the surgery  
10 done by Dr. Clemons, was Brett given supplemental  
11 oxygen afterwards during his transit to the PACU?

12 A Yes, sir.

13 Q Okay. Did you order supplemental oxygen  
14 for him in the PACU?

15 A Yes, sir.

16 Q You ordered supplemental oxygen?

17 A Yeah. We have a standard order saying  
18 that, you know, that the patient needs O2  
19 supplementation to maintain the saturation of 92 or  
20 95 and above.

21 Q All right. My question was when he left  
22 surgery was he on supplemental oxygen.

23 A Yes, sir.

24 Q Okay. And when he arrived in the PACU,  
25 even though you were not there, was he on

1 supplemental oxygen, do you think?

2 A I think.

3 Q All right.

4 A That is the routine to have a supplemental  
5 oxygen in the recovery room.

6 Q Was he outfitted when he left the surgical  
7 suite with a pulse oximeter on one of his fingers?

8 A Yes, sir.

9 Q And had there been any previous problem  
10 with that pulse oximeter during his surgery?

11 A No, sir.

12 Q Do you know whether the pulse oximeter that  
13 he wore when he went to the PACU was, in fact, the  
14 same one that he wore when he went to the ICU after  
15 the Harvey team came?

16 A Probably the same one.

17 Q Okay. Did you ever test this pulse  
18 oximeter to see whether it was defective or failed?

19 A There are no tests in the sense because  
20 we -- whether it is working or not. If it is not  
21 working, sometimes we change it to a different pulse  
22 oximeter.

23 Q Now at the time when the CRNA, Grace  
24 Freeman, would have attended Brett Lovelace, would --  
25 do you know whether she saw the parents at that time?



1 Aldrete score perfect.

2 Q Now at the time that Brett Lovelace was  
3 extubated, approximately how much time passed between  
4 that moment and the time that he would have been  
5 transported?

6 Is that normally five minutes? Or how long  
7 is that?

8 A Can you rephrase the question, please.

9 Q Yes.

10 Between the time of extubation of the  
11 patient how much time elapsed before he was  
12 transported to the PACU?

13 A We extubated the patient 10:26. And the  
14 patient reached the recovery room 10:35, so nine  
15 minutes.

16 Q Is it your testimony that the patient was  
17 virtually awake at the time that he was extubated?

18 A Yes, sir.

19 Q Okay. As a rule and a practice how often  
20 would you allow patients to go and be on their face  
21 in recovery?

22 MR. COOK: Same, form.

23 Go ahead.

24 A That is a speculation.

25

1 eyes, we asked him to open the eyes and take a deep  
2 breath. When they follow those commands, that we  
3 consider awake. And we use the clinical judgment --  
4 I used the clinical judgment to extubate that patient  
5 at that time.

6 Q Are you telling us that Brett Lovelace had  
7 fully emerged from and recovered appropriately from  
8 the anesthesia?

9 A Not fully recovered, but he is awake enough  
10 to be extubated. That is why we take them to the  
11 recovery room to be fully awake.

12 Q Now on March 12, 2012 how well did you know  
13 Nurse Kelly Kish?

14 What was your experience with her as a PACU  
15 nurse?

16 A I know she was working in the recovery  
17 room. I'm not sure how long she has been working.

18 Q What was your experience with her?

19 Was she a good nurse?

20 A I don't know much about her.

21 Q Did you ever complain about her before this  
22 event?

23 A No, sir.

24 Q Okay. Did you talk to Grace Freeman and  
25 ask if she personally visited with Nurse Kelly Kish

1 keep him on either a continuous positive airway  
2 pressure or to continue his intubation and mechanical  
3 ventilation until he was fully awake?

4 A Can you repeat that question, please.

5 Q Did you issue instructions or orders for  
6 Brett to be on continuous positive airway pressure  
7 after he was transported?

8 A We have a standard; not a continuous airway  
9 pressure, but continuously getting oxygen to the  
10 patient by face mask.

11 Q Okay. And what you are saying is he was  
12 continuously on oxygen until he was fully awake?

13 A Supposed to be, yes.

14 Q Okay. Were you aware that he was not on  
15 oxygen?

16 A I did not know that.

17 Q Okay. I think you said earlier that you  
18 did not administer any narcotic analgesic to him?

19 A No, I didn't say that.

20 MR. COOK: Objection.

21 BY MR. LEDBETTER:

22 Q You gave him an opiate for the anesthetic;  
23 correct?

24 A Yeah.

25 Q But did you give him an analgesic besides

1 better because the tongue will fall out and the  
2 bleeding, if there is any bleeding, they will be in  
3 what is called post-tonsillectomy position. It is  
4 semi prone. That is laying on the side.  
5 (Indicating.)

6 Q Well, this idea of a semi-prone position is  
7 an old position that goes back to the fifties, does  
8 it not?

9 It is not a current --

10 A I don't know.

11 Q Okay. Well, current practice concerning  
12 the apnea that we are discussing is not to allow them  
13 being on their face because that blocks the airway.

14 A No patient should be. It doesn't matter  
15 whether it is sleep apnea patient or any patient  
16 should not be on the mouth in the bed.

17 MR. LEDBETTER: Okay. I think  
18 we need to probably change a tape.

19 MR. COOK: All right. Shall  
20 we take a short break, please.

21 VIDEOGRAPHER: Off the record  
22 at 11:02 a.m.

23 (Brief recess.)

24 VIDEOGRAPHER: Back on the  
25 record at 11:10 a.m.

1 IN THE UNITED STATES DISTRICT COURT  
2 FOR THE WESTERN DISTRICT OF TENNESSEE

---

3 DANIEL LOVELACE and  
4 HELEN LOVELACE, Individually,  
5 and as Parents of BRETT LOVELACE,  
6 deceased,

7 Plaintiff,

8 Vs.

NO.2:13-cv-02289-JPM-dkv

9 PEDIATRIC ANESTHESIOLOGISTS, P.A.;  
10 BABU RAO PAIDIPALLI; and MARK P.  
11 CLEMONS, MD.

12 Defendants.

---

13 THE DEPOSITION OF DANIEL LOVELACE  
14 January 15, 2014

15 VIDEO DEPOSITION

16  
17  
18  
19  
20  
21  
22  
23 Madelyn E. Gray  
24 Court Reporter  
Suite 303, 22 N. Second Street  
Memphis, Tennessee 38103  
(901) 527-1100

 COPY

1 waiting area. This was the check-in desk.

2 There was these double doors right here with a  
3 little short hallway, and then the next. And  
4 it just opened out into the PACU.

5 Q. Okay.

6 A. And Dr. Clemons was like, as we come to  
7 this little hallway, he was -- we met with him  
8 and we walked probably ten steps to Brett's  
9 bed.

10 Q. Okay. So as you were walking with  
11 Dr. Clemons, what did he say?

12 A. He was telling us that the surgery went  
13 okay and that his tonsils was bigger than he  
14 had seen in a child for his age, and his  
15 adenoids and stuff. And we walked up and I  
16 told Helen to get a picture of the way Brett  
17 was laying in that bed because I was going to  
18 make fun of him when he come to, because of  
19 the way he was laying in that bed.

20 Q. And how was that?

21 A. He was laying face down and had his legs  
22 up under him like a little baby.

23 Q. Okay. And what happened then? Let me  
24 back up. What did Dr. Clemons say, other than

1 is Brett's bed, there's a computer here, with  
2 his nurse right there. This is his foot of  
3 the bed. All three of us walked around here.  
4 And Dr. Clemons stood right here and was  
5 telling Helen and the nurse what medication  
6 and everything that he needed to have  
7 prescribed, and to, where to send it and  
8 everything. But when all three of us walked  
9 up, that nurse was already right there.

10 Q. Okay. And is that Nurse Kish?

11 A. Yes. If that's her name.

12 Q. Okay.

13 A. I guess.

14 Q. Okay. So she was already there. And  
15 then she was on the other side of the bed from  
16 you?

17 A. Yes, sir.

18 Q. Is that right?

19 A. Yes, sir.

20 Q. Okay. And then you leaned over on the,  
21 on the other side of the bed. And was, did  
22 Brett have his head turned toward you or  
23 toward the nurse?

24 A. He was face down.

IN THE UNITED STATES DISTRICT COURT FOR  
THE WESTERN DISTRICT OF TENNESSEE

---

DANIEL LOVELACE and  
HELEN LOVELACE, Individually  
and as Parents of BRETT  
LOVELACE, Deceased,

Plaintiff,

v.

Case Number 2:13-cv-02289

PEDIATRIC ANESTHESIOLOGISTS,  
P.A., BABU RAO PAIDIPALLI, and  
MARK P. CLEMONS,

Defendant.

---

VIDEOTAPE DEPOSITION

OF

KELLY KISH

May 15, 2014

COPY

JILL W. HODGES, RPR, LCR #380  
P O BOX 381722  
Germantown, Tennessee 38138-1722  
(901) 335-7952

R I V E R S I D E   R E P O R T I N G



1 there, that neither of them attended this patient  
2 when he arrived at the PACU?

3 MR. GILMER: Object to the form.

4 Q. (By Mr. Ledbetter) Am I correct about  
5 that?

6 MR. TALLEY: Go ahead and answer.

7 A. All I remember is the student nurse  
8 anesthetist being at the bedside because I didn't  
9 know her, and I don't remember the person you're  
10 talking about, and Dr. Paidipalli did not come  
11 out with that patient.

12 Q. Did Grace Freeman, a licensed nurse  
13 anesthetist, attend also?

14 MR. GILMER: Object to the form.

15 MR. TALLEY: Go ahead and answer.

16 A. I don't remember, and I don't know that  
17 person.

18 Q. Would you remember if a nurse  
19 anesthetist had reported that she was there to  
20 see and assess him then, would you remember that?

21 A. I just remember talking to the student  
22 nurse anesthetist, and I don't even know her  
23 name.

24 Q. Okay. Well, let me ask you this. By

1           A.     Yeah, I don't remember all the blankets.  
2 I remember his feet; you know, his legs being  
3 tucked under. I don't remember them being that  
4 far, and I can't tell which way his face is  
5 facing there. He kind of had longer hair than I  
6 remember, but that's um ...

7           Q.     But do you have any reason to doubt  
8 that's the same person in all these pictures?

9           A.     Yes, that's correct.

10                  MS. MAGEE: Did you mark this as 8?

11                  MR. LEDBETTER: Yes, mark it,  
12 please.

13                  (Whereupon, the above-mentioned  
14 photograph was marked as Exhibit Number  
15 8 to the testimony of the witness.)

16           Q.     (By Mr. Ledbetter) Now, at the time --  
17 at the time that you were there with him and his  
18 parents were there with him, did Dr. Clemons have  
19 an opportunity to see Brett positioned on his  
20 stomach with his legs bunched up under him?

21                  MS. MAGEE: Object to the form.

22                  MR. TALLEY: Go ahead and answer.

23           Q.     (By Mr. Ledbetter) Go ahead and answer.

24           A.     He did. He did.

1 Q. Okay. For how many minutes would Dr.  
2 Clemons have been there talking and chatting as  
3 he had a clear view of this patient in this  
4 position on his stomach?

5 MS. MAGEE: Same objection.

6 MR. TALLEY: Go ahead and answer.

7 A. I would say approximately five minutes.

8 Q. Okay. Did either he or anyone acting on  
9 behalf of the anesthesia team say, good gracious,  
10 get him in his side in a normal position?

11 MR. GILMER: Object to the form.

12 MS. MAGEE: Object to the form.

13 Q. (By Mr. Ledbetter) Did they say that?

14 MR. TALLEY: Go ahead and answer.

15 A. No, they did not.

16 Q. If they had said that to turn him to a  
17 lateral position, would you have done that?

18 A. I would have done that.

19 Q. Okay. And if they had told you that he  
20 needed to be on supplemental oxygen, would you  
21 have attached that or connected him to  
22 supplemental oxygen?

23 A. I would have.

24 MS. MAGEE: Object to the form of

RECEIVED  
2013 FEB 22 PM 3:21

BEFORE THE TENNESSEE BOARD OF NURSING

SECRETARY OF STATE

In The Matter of: )

KELLY KISH )

R.N. License Number 99584 )

) Docket Number 17.19-118516A

Respondent )

AGREED ORDER

The State of Tennessee, by and through the Office of General Counsel and the Respondent, Kelly Kish, R.N., (Respondent), by and through her attorney, hereby stipulate and agree, subject to approval by the Tennessee Board of Nursing (Board), to the following:

I. Authority and Jurisdiction

The Board regulates and supervises nurses licensed to practice pursuant to Tennessee Code Annotated Section (TENN. CODE ANN. §) 63-7-101, *et seq.* (Code), including the discipline of licensees, as well as those who are required to be licensed, who violate the Code and the Rules promulgated by the Board, Official Compilation of Rules and Regulations of the State of Tennessee (TENN. COMP. R. & REGS.), 1000-01-.01, *et seq.* (Rules). The Board enforces the Code and Rules to promote and protect the health, safety and welfare of the public; accordingly, it is the policy of the Board to require strict compliance with the law and to apply the law to preserve the quality of nursing care provided in Tennessee.

II. Stipulations of Fact

1. Respondent has been at all times pertinent hereto licensed by the Board as a registered nurse in the State of Tennessee, having been granted license number 99584 on June 14, 1994, which currently has an expiration date of April 30, 2014. Respondent's registered nurse license bears a multistate privilege to practice nursing in states which have entered into the Interstate Nurse Licensure Compact.



2. Respondent was employed as a registered nurse by LeBonheur Children's Hospital in Memphis, Tennessee from about February 11, 2008 through about March 23, 2012.
3. On or about March 12, 2012, Respondent was assigned to care for a 12-year-old male patient ("the patient") who was in the post anesthesia care unit (PACU) following a tonsillectomy/adenoidectomy. The patient was the only patient assigned to Respondent during the approximately 90 minutes the patient was in the PACU.
4. The patient was stable upon transfer from the operating room to the PACU.
5. The patient's mother and father were present in the PACU with the patient.
6. Upon arrival to the PACU, the patient positioned himself prone, with his legs drawn up under him, buttocks in the air, arms crossed over his head, and his face down on the mattress. At no time did Respondent attempt to change the patient's position.
7. Upon the patient's arrival into the PACU, Respondent made an initial assessment but chose not to place the patient on a cardiac monitor, as permitted by hospital policy.
8. Respondent placed a pulse oximeter on the patient, but the oximeter worked only intermittently, and Respondent did not notify anyone of the problem and did not replace the device.
9. At no time did Respondent attempt to speak with or rouse the patient, despite charting a rating of 9 out of 10 on the Aldrete scale. Such a score would indicate, among other things, full breathing, high oxygen saturation, full consciousness, good circulation, and lively activity and motor control. Respondent admitted that she never roused or checked on the patient to make these ratings, but instead charted based on her observation of the patient's status when he initially entered the PACU. Among other things, Respondent charted the patient's level of consciousness as "arousable on calling" from the time he entered the PACU up until the "Harvey" code, indicating an unresponsive patient, was called, as

detailed below.

10. Throughout her time caring for the patient, Respondent documented oxygen saturations that were not reflected on the print-out. Respondent documented, for example, 100% oxygen saturation when the monitor read only "artifact" or levels below 25%.
11. Respondent documented a series of assessments approximately every 15 minutes that the patient was in the PACU during the patient's first hour, then every 30 minutes thereafter, as dictated by hospital policy. In her assessments Respondent documented, in addition to the Aldrete scores noted above, breath sounds and readings from an automated blood pressure cuff.
12. At one point, the patient was heard making snoring and/or gasping noises, which the patient's parents brought to Respondent's attention. Respondent discussed the sounds with the parents, and Respondent states she also discussed the sounds with a physician. Respondent did not take any further action in response to these noises.
13. Approximately 30 minutes after the patient was admitted to the PACU, Respondent documented the patient's blood pressure as 118 over 56. Approximately 45 minutes after the patient was admitted to the PACU, Respondent documented the patient's blood pressure as 106 over 53. Approximately 60 minutes after the patient was admitted to the PACU, Respondent charted that the patient's blood pressure was 84 over 42. Respondent did not take any action in response to these changes in the patient's blood pressure.
14. Approximately 90 minutes after the patient was admitted to the PACU, Respondent left to obtain fluids for the patient. Upon her return, the patient's father asked Respondent for help turning the patient, as the patient's leg appeared blue. When the patient was turned supine, he was noted to be deeply cyanotic, apneic, and pulseless. CPR was initiated, and a "Harvey" code, indicating a nonresponsive patient, was called.



15. While the patient was eventually resuscitated, he suffered severe anoxic brain injury and died approximately 48 hours later.
16. During the patient's time in the PACU, Respondent accessed Facebook and at least one other social media website using a hospital computer.
17. On or about March 23, 2012, Respondent resigned in lieu of termination.

### **III. Stipulated Grounds for Discipline**

18. The Stipulations of Fact are sufficient to establish that Respondent has violated the following statutes or rules, for which disciplinary action by the Board is authorized, TENN. CODE ANN. § 63-7-101, *et seq.* and TENN. COMP. R. & REGS., 1000-01-.01, *et seq.*
19. The facts stipulated in paragraphs six (6) through thirteen (13), and paragraph sixteen (16) constitute a violation of TENN. CODE ANN. § 63-7-115 (a)(1): The board has the power to deny, revoke or suspend any certificate or license to practice nursing or to otherwise discipline a licensee upon proof that the person:
  - (C) Is unfit or incompetent by reason of negligence, habits or other cause;
  - (F) Is guilty of unprofessional conduct.
20. The facts stipulated in paragraphs six (6) through thirteen (13), and paragraph sixteen (16) constitute a violation of Rule 100-01-.13(1) TENN. COMP.R.REGS., RULE 1000-01-.13(1):
  - (a) Intentionally or negligently causing physical or emotional injury to a patient;
  - (c) Abandoning or neglecting a patient requiring nursing care.
21. The facts stipulated in paragraphs eight (8) through eleven (11) constitute a violation of Rule 100-01-.13(1) TENN. COMP.R.REGS., RULE 1000-01-.13(1) (a):
  - (b) Failure to maintain a record for each patient which accurately reflects the nursing problems and interventions for the patient and/or failure to maintain a record for each patient which accurately reflects the name and title of the nurse providing care;

(w) Engaging in acts of dishonesty which relate to the practice of nursing.

#### **IV. Stipulated Disposition**

For the purpose of avoiding further administrative action with respect to this cause, Respondent agrees to the following:

22. It is hereby ordered that Respondent's Tennessee nursing license number 99584 is **REVOKED** and her multistate privilege to practice in any other party state is **VOID**.
23. Respondent must pay the actual and reasonable costs of prosecuting this case, pursuant to TENN. CODE ANN. §§ 63-7-115(d) and 63-1-144 and Rule 1000-01-.04(11) of the TENN. COMP. R. & REGS., to the extent allowed by law. These costs will be established by an Assessment of Costs prepared by counsel for the Department. The Assessment of Costs shall not exceed one thousand dollars (\$1,000.00) and shall be paid in full within twelve months from the issuance of the Assessment of Costs.
24. Each condition of discipline herein is a separate and distinct condition. If any condition of this Order, or any application thereof, is declared unenforceable in whole, in part, or to any extent, the remainder of this Order, and all other applications thereof, shall not be affected. Each condition of this Order shall separately be valid and enforceable to the fullest extent permitted by law.

#### **V. Representations of Respondent**

25. Respondent understands and admits the allegations, charges, and stipulations in this Order.
26. Respondent understands the rights found in the Code, the Rules, and the Uniform Administrative Procedures Act, TENN. CODE ANN. §§ 4-5-101 through 4-5-404, including the right to a hearing, the right to appear personally and by legal counsel, the right to confront and cross-examine witnesses who would testify against Respondent, the right to testify and present evidence on Respondent's own behalf, including the issuance of



subpoenas to compel the attendance of witnesses and the production of documents, and the right to appeal for judicial review. Respondent voluntarily waives these rights in order to avoid further administrative action.

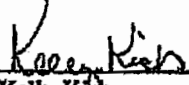
27. Respondent agrees that presentation of this Order to the Board and the Board's consideration of it and all matters divulged during that process shall not constitute unfair disclosure such that the Board or any of its members become prejudiced requiring their disqualification from hearing this matter should this Order not be ratified. All matters, admissions, and statements disclosed during the attempted ratification process shall not be used against the Respondent in any subsequent proceeding unless independently entered into evidence or introduced as admissions.
28. Respondent also agrees that the Board may issue this Order without further process. If the Board rejects this Order for any reason, it will be of no force or effect for either party.

**VI. Notice**

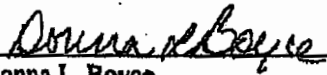
29. This revocation is formal disciplinary action and will be reported to the Health Integrity and Protection Data Bank (HIPD).
30. Costs shall be paid by submitting a certified check, cashier's check, or money order payable to the State of Tennessee. Costs payments must include the Respondent's name and this case number, 201200757, on the instrument of payment and shall be mailed or delivered to:

Office of Investigations  
Attn: Disciplinary Coordinator  
Tennessee Department of Health  
227 French Landing, Suite 201  
Nashville, Tennessee 37243

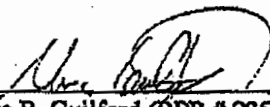
**APPROVED FOR ENTRY:**

  
\_\_\_\_\_  
Kelly Kish  
R.N. License Number 99584  
Respondent

2/19/13  
DATE

  
\_\_\_\_\_  
Donna L. Boyce  
Adams and Reese LLP  
Brinkley Plaza  
80 Monroe Ave, Suite 700  
Memphis, Tennessee 38103  
(901) 525-3234  
Attorney for Respondent

2/19/13  
DATE

  
\_\_\_\_\_  
Marc R. Guilford (BPR # 025419)  
Assistant General Counsel  
Tennessee Department of Health  
Office of General Counsel  
220 Athens Way, Suite 210  
Nashville, Tennessee 37243  
(615) 741-1611

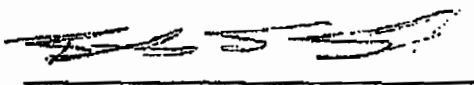
2/20/13  
DATE

---

**Approval by the Board**

Upon the agreement of the parties and the record as a whole, this **CONSENT ORDER** was approved as a **FINAL ORDER** by a majority of a quorum of the Tennessee Board of Nursing at a public meeting of the Board and signed this 20<sup>th</sup> day of February, 2013.

**ACCORDINGLY, IT IS ORDERED** that the agreements of the parties will, and hereby do, become the Final Order of the Board.

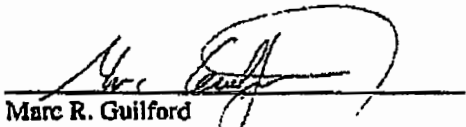
  
\_\_\_\_\_  
Chairperson/Acting Chairperson  
Tennessee Board of Nursing

---

**CERTIFICATE OF SERVICE**

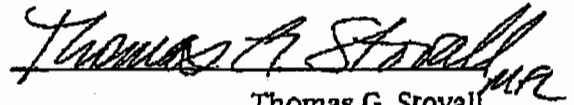
The undersigned hereby certifies that a true and correct copy of this document has been served upon the Respondent, Kelly Kish through her counsel, Donna L. Boyce, Adams and Reese, 80 Monroe Ave, Suite 700, Memphis, Tennessee 38103, by delivering same in the United States regular mail and United States certified mail, number 70121640000239215150 return receipt requested, with sufficient postage thereon to reach its destination.

This 22<sup>nd</sup> day of February, 2013.

  
\_\_\_\_\_  
Marc R. Guilford  
Assistant General Counsel

CERTIFICATE OF FILING

This Order was received for filing in the Office of the Tennessee Secretary of  
State, Administrative Procedures Division, and became effective on the 22nd  
day of February, 2013.



Thomas G. Stovall  
Director, Administrative Procedures Division

# Can We Make Postoperative Patient Handovers Safer? A Systematic Review of the Literature

Noa Segall, PhD,\* Alberto S. Bonifacio, BSN,† Rebecca A. Schroeder, MD,\*† Atilio Barbeito, MD,\*† Dawn Rogers, BSN,† Deirdre K. Thornlow, RN, PhD,‡ James Emery, PhD,§ Sally Kellum, RN-BC, MSN,|| Melanie C. Wright, PhD,¶ and Jonathan B. Mark, MD\*†; On behalf of the Durham VA Patient Safety Center of Inquiry

Postoperative patient handovers are fraught with technical and communication errors and may negatively impact patient safety. We systematically reviewed the literature on handover of care from the operating room to postanesthesia or intensive care units and summarized process and communication recommendations based on these findings. From >500 papers, we identified 31 dealing with postoperative handovers. Twenty-four included recommendations for structuring the handover process or information transfer. Several recommendations were broadly supported, including (1) standardize processes (e.g., through the use of checklists and protocols); (2) complete urgent clinical tasks before the information transfer; (3) allow only patient-specific discussions during verbal handovers; (4) require that all relevant team members be present; and (5) provide training in team skills and communication. Only 4 of the studies developed an intervention and formally assessed its impact on different process measures. All 4 interventions improved metrics of effectiveness, efficiency, and perceived teamwork. Most of the papers were cross-sectional studies that identified barriers to safe, effective postoperative handovers including the incomplete transfer of information and other communication issues, inconsistent or incomplete teams, absent or inefficient execution of clinical tasks, and poor standardization. An association between poor-quality handovers and adverse events was also demonstrated. More innovative research is needed to define optimal patient handovers and to determine the effect of handover quality on patient outcomes. (Anesth Analg 2012;115:102–15)

Patient handovers, defined as “the transfer of information and professional responsibility and accountability between individuals and teams,”<sup>1</sup> are high-risk, error-prone patient care episodes.<sup>2,3</sup> Handover failures are common and can lead to diagnostic and therapeutic delays and precipitate adverse events.<sup>4–8</sup> The transfer of care after surgery to the postanesthesia care unit (PACU) or intensive care unit (ICU) presents special challenges to providers on both the delivering and receiving teams. The operating room (OR) anesthesia and surgical team is charged with transporting the patient, along with clinical and monitoring equipment, from the OR to the receiving unit, while simultaneously monitoring and performing additional

therapeutic tasks such as manual ventilation. Upon arrival at the receiving unit, the technology and support are transferred to local systems while knowledge of the patient gained by the OR team during the procedure is transmitted, in an environment that is often chaotic and busy, to a team largely unfamiliar with the patient. This knowledge transfer involves cross-disciplinary staff with varied experience; the delivering team members with their diverse yet important perspectives of the course of surgery; and the receiving team concurrently stabilizing, assessing, and making care plans for the patient.

It is not surprising, under these circumstances, that postoperative handovers are rife with technical and communication errors.<sup>7,9,10</sup> Several studies also point to a relationship between handovers and patient outcomes.<sup>11–13</sup> As recognition of the risks inherent to patient handovers has grown, increasing attention has focused on this process of care. In light of this interest, it is important to characterize current practices in postoperative handovers and to identify evidence-based methods to improve them. The goal of this study was to present a review of the literature on this topic and to summarize process and communication recommendations based on its findings.

## METHODS

A search was conducted using the PubMed and ProQuest databases with the terms *handover*, *handoff*, and *patient transfer* and combinations of each term with the terms *postoperative*, *anesthesia*, *postanesthesia*, *surgery*, *operating room*, *ICU*, *critical care*, *intensive care*, *surgical intensive care*, *admission*, *communication*, and *team*. Other information sources included the Agency for Healthcare Research and

From the \*Department of Anesthesiology, Duke University Medical Center, Durham; †Anesthesiology Service and ‡Clinical Informatics, Veterans Affairs Medical Center, Durham; §School of Nursing and ¶Fuqua School of Business, Duke University, Durham, North Carolina; and ||Patient Safety Research, Saint Alphonsus Health System, a member of Trinity Health, Boise, Idaho.

Accepted for publication February 3, 2012.

The Durham VA Patient Safety Center of Inquiry is a multidisciplinary team focused on optimizing the safety of patient care through research, high-fidelity point-of-care simulation training, and the diverse perspectives of clinicians, human factors engineers, and organizational behavior experts. Its members are B. Atkins, A. Barbeito, A. Bonifacio, R. Burton, J. Emery, G. Hobbs, M. Holtschneider, O. Jennings, S. Kellum, J. Mark, S. Perfect, D. Rogers, R. Schroeder, T. Schwartz, N. Segall, S. Sitkin, J. Taekman, D. Thornlow, and M. Wright.

Supported by the VA National Center for Patient Safety.

The authors declare no conflicts of interest.

Reprints will not be available from the authors.

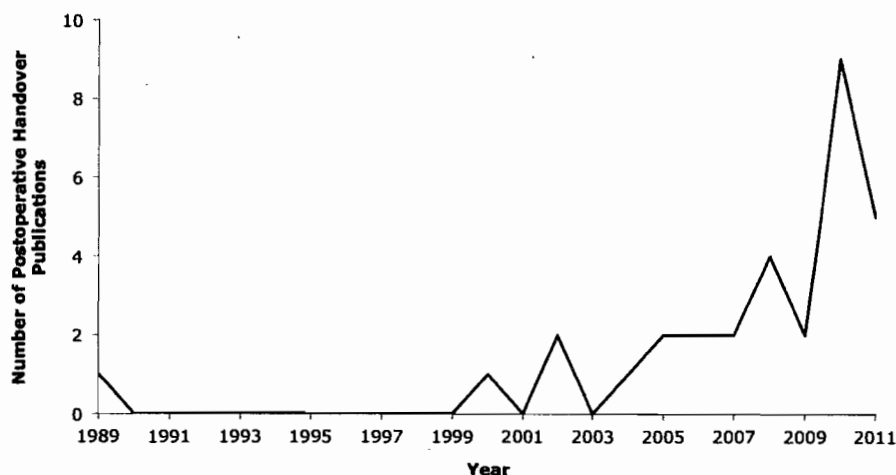
Address correspondence to Noa Segall, PhD, Department of Anesthesiology, Duke University Medical Center, Box 3094, Durham, NC 27710. Address e-mail to noa.segall@duke.edu.

Copyright © 2012 International Anesthesia Research Society

DOI: 10.1213/ANE.0b013e318253af4b



**Figure 1.** Number of journal articles dealing with postoperative handovers by year.



Quality Collection on Discontinuities, Gaps, and Hand-Off Problems<sup>a</sup> and handover-related literature reviews.<sup>14–18</sup> More than 500 papers were identified. All titles were reviewed for possible inclusion and, for those that were deemed relevant, the abstracts were examined to ensure relevance. Reference sections of papers that met inclusion criteria were scrutinized for additional sources. All papers that addressed patient transfers from the OR to the PACU or ICU were included in the literature review. Papers on other handover types, e.g., work shift changes, and those discussing transfers not originating in the OR were excluded.

Papers included in this review were classified into 1 of 4 categories as proposed by Wong et al.<sup>16</sup>:

- Category 1: Comprehensive intervention-based study—Clear articulation of entire approach to improve clinical handover covering data collection, intervention design, implementation and evaluation, and insights into lessons learned. High level of potential transferability.
- Category 2: Intervention-based study—Approach to clinical handover improvement intervention that is not comprehensive or is limited in depth/clarity. Medium to low level of potential transferability.
- Category 3: Preintervention study—Studies variously engaging in data collection, analysis, and evaluation to investigate different aspects of clinical handover. Focused on enhancing understanding, identifying gaps and challenges, or the utility of particular research approaches. Some studies provide recommendations for change management, handover improvement interventions, or system reform. High to low level of potential transferability.

- Category 4: Published opinions or reviews—Publications not involving any primary research and often not peer reviewed. Can provide potentially useful perspectives on different aspects of clinical handover including high-risk scenarios, evidence gaps, and factors imposing limitations on sustainability or transferability of handover initiatives.

## RESULTS

Thirty-one articles met the inclusion criteria. Twenty-four included recommendations for structuring the handover process or information transfer. Of these, 14 supported the proposed solutions with some level of evidence. Only 4 papers described comprehensive intervention-based studies (category 1). Five additional studies described handover training initiatives and the creation of printed or electronic postoperative reports, with limited evaluation of their efforts (category 2). There are 18 cross-sectional studies characterizing current postsurgery handover practices (category 3). All papers were published in 2000 or later with the exception of a 1989 paper listing information needed by the PACU nurse receiving new patients.<sup>19</sup> Fourteen were published in 2010 or later (Fig. 1). The papers are presented in Table 1.

As stated earlier, 4 of the studies developed an intervention and formally assessed its impact on process measures during handovers.<sup>10,20–22</sup> The interventions involved various combinations of a handover protocol to structure tasks and processes, an information transfer checklist to standardize communication, and team training. Different methods were used to develop them. A Six Sigma approach was adopted in 1 study in which 3 barriers to safe handovers were identified: (1) inconsistent participation of clinicians from the delivering team in information exchange; (2) poor standardization of content and processes; and (3) the presence of interruptions and distractions. A protocol was developed to address these and other issues that were found to lead to frequent communication errors.<sup>22</sup> In another study, a protocol for handover of surgical patients

<sup>a</sup> Agency for Healthcare Research and Quality: Discontinuities, Gaps, and Hand-Off Problems. Available at: <http://www.psneta.hqr.gov/collection/Browse.aspx?taxonomyID=412>. Accessed November 21, 2011.

Table 1. Postoperative Handover Papers Included in the Review

Authors	Category <sup>a</sup>	Methods	Results	Information content recommendations <sup>b</sup>	Process recommendations <sup>b</sup>
Amato-Vealey et al. (2008) <sup>54</sup>	4	Recommendations for operationalizing SBAR in the perioperative environment, including information that should be communicated to the PACU nurse	—	P	P
Anwari (2002) <sup>23</sup>	3	After 276 handovers, PACU nurses were surveyed regarding the quality of verbal information, patient condition on admission, the professional behavior of the anesthetist, and the nurse's satisfaction with the handover	Nurses reported many missing pieces of information. 24% of handovers were rated as "bad"	P	P
Beckmann et al. (2004) <sup>13</sup>	3	Cross-sectional analysis of incident reports relating to the intrahospital transfer of critically ill patients	The majority of incidents (36%) involved OR-to-ICU or ICU-to-OR transportation		R
Botti et al. (2009) <sup>55</sup>	4	A framework of methods to measure and promote clinical governance, clinician engagement, ecological validity, safety culture and team climate, and sustainability in the context of handovers to the PACU	—		
Catchpole et al. (2007) <sup>10</sup>	1	Redesign of handovers of pediatric cardiac patients from OR to ICU. A handover protocol and information transfer checklist were developed based on discussions with Formula 1 racing team and aviation training captains	The intervention reduced the number of technical errors and information omissions	R	R
Catchpole et al. (2010) <sup>56</sup>	3	Interviews with Formula 1 racing teams and clinicians involved in postoperative handovers to compare work practices	Deficiencies in proactive prevention, active handover management, and learning from error analysis were identified in health care practice		P
Chen et al. (2010) <sup>67</sup>	2	Description of 2 simulation scenarios for handing over pediatric cardiac patients from OR to ICU	Positive comments from simulation participants		P
Chen et al. (2011) <sup>30</sup>	3	Three years after implementation of a protocol to standardize postoperative handovers to a pediatric cardiac ICU, observed practice was compared with protocol guidelines	Attendance of required providers was high. Only 53% of required content items were reported, but other relevant information was often reported. A mean of 2.3 distractions per minute of communication was noted, more than half of which were not essential to patient care.	P	P
Clancy (2008) <sup>3</sup>	3	Description of a study to improve handovers to the PACU using simulation-based training	—		
Currey et al. (2006) <sup>52</sup>	3	Interviews with ICU nurses regarding perceptions of assuming responsibility for patient care, after observation of their admission of cardiac surgical patients	Nurses who perceived receiving patients to be a positive challenge used handovers to identify decision points. Nurses who were daunted by this process used them to gather information about patient hemodynamic status, likely trajectories, and management priorities		R
de Leval et al. (2000) <sup>4</sup>	3	Cross-sectional study of major and minor events associated with arterial switch operations	Examples of events that occurred during transfer to the ICU include incorrect interpretation of serious patient deterioration, communication problems during handover, lack of seniority in OR or ICU teams, and prolonged absence of monitoring		

(Continued)

Table 1. (Continued)

Authors	Category <sup>a</sup>	Methods	Results	Information content recommendations <sup>b</sup>	Process recommendations <sup>b</sup>
Entlin et al. (2006) <sup>28</sup>	4	A research agenda for investigating the impact of team training on perioperative patient safety. Includes a brief discussion of postoperative handovers	In handover observations, lack of consistency and organization was noted during information transfer. Important information was sometimes omitted, undetected		
Greenberg et al. (2007) <sup>12</sup>	3	An analysis of surgical malpractice claims that involved communication failures	At least 43% of claims were associated with handovers and 39% were associated with patient transfers		R
Joy et al. (2011) <sup>21</sup>	1	Development of a protocol and anesthesia information transfer template to standardize postsurgical patient transfer to the pediatric cardiac ICU, based on FMEA and root cause analyses	The intervention led to a reduction in technical errors, information omissions, time to transfer central venous pressure monitoring, and time to definitively secure the endotracheal tube. Perceptions of teamwork and received information improved	R	R
Kim et al. (2012) <sup>33</sup>	2	Development of a protocol and electronic checklist to reduce communication errors during transfer of care of postoperative pediatric airway patients	Of 33 patients, 2 experienced adverse events preintervention. Postintervention, of 93 patients, none experienced adverse events. Anecdotal evidence of increased efficiency	P	P
Kluger and Bullock (2002) <sup>11</sup>	3	An analysis of incident reports relating to the PACU	Poor communication was the second most common contributing factor, associated with 14% of incidents		
Manser et al. (2010) <sup>32</sup>	3	Development and validation of a handover rating tool assessing technical and nontechnical skills. Validation included ratings of OR to PACU handovers	Three concepts were found to be of importance during handovers: information transfer, shared understanding, and working atmosphere	R	R
Mazzocco et al. (2009) <sup>6</sup>	3	The teamwork of surgical teams was scored for the induction, intraoperative, and handover phases; patients' 30-day outcomes were documented	Patients whose teams exhibited less briefing and information sharing during the handover were at higher risk for complications or death	R	R
McQueen-Shadfar and Taekman (2010) <sup>58</sup>	2	Description of a simulation scenario for handing over a pediatric patient from OR to PACU using the I PASS the BATON mnemonic	—	P	
Meyer-Bender <sup>45</sup>	2	Generation of printed reports from an anesthesia information management system for postoperative handovers, among other uses	Anecdotal evidence of good acceptance by users	P	
Mistry et al. (2005) <sup>7</sup>	3	Assessed the prevalence of missing or inaccurate information during handover of patients to the pediatric ICU postsurgery	Miscommunication occurred in 100% of handovers. In 94% of cases, there was >1 error		
Mistry et al. (2008) <sup>22</sup>	1	A Six Sigma methodology was used to improve handover of cardiac patients to the pediatric ICU. The intervention included a handover protocol and team training	The intervention reduced handover and lab draw times and increased the percentage of chest radiographs completed and patients placed on monitors within 3 min		R

(Continued)



Table 1. (Continued)

Authors	Category <sup>a</sup>	Methods	Results	Information content recommendations <sup>b</sup>	Process recommendations <sup>b</sup>
Nagpal et al. (2010a) <sup>25</sup>	3	Development of a checklist of information to be communicated during handover to the recovery room using interviews and the Delphi consensus building method	Handovers were characterized by fragmented information transferred by an incomplete team. Handover effectiveness was highly variable. A 21-item checklist was developed	R	R
Nagpal et al. (2010b) <sup>26</sup>	3	An examination of perioperative communication using HFMEA	One of the critical failures identified deals with incomplete or inaccurate handovers to recovery. Authors recommend a debrief in the OR in the presence of the recovery nurse and use of an information transfer checklist		R
Nagpal et al. (2010c) <sup>27</sup>	3	HFMEA and interviews were used to develop ITCAS, an observational tool for assessing perioperative communication	Only 56% of essential information was transferred to the recovery suite. Two incidents were observed related to information omission	R	R
Nagpal et al. (2011) <sup>9</sup>	3	Development and assessment of the validity, reliability, and feasibility of PoHAT, an observational tool for evaluating postoperative handovers	There were 9.1 information omissions and 2.9 task errors per handover. Distractions occurred in 35% of handovers and correlated with information omissions	R	R
Nestel et al. (2005) <sup>39</sup>	2	Handover training was developed for "perioperative specialist practitioners" who deliver care before and after surgery and transmit patient information to surgeons and anesthesiologists	Trainees gave positive feedback related to the training intervention		P
Smith et al. (2008) <sup>24</sup>	3	A qualitative description of handovers to the recovery room based on observations and interviews	Handovers showed inherent professional and organizational tensions. Standardization efforts should recognize these factors		
Smith and Mishra (2010) <sup>31</sup>	3	A qualitative description of postoperative handovers based on observations and interviews	Handovers showed inherent professional and organizational tensions. Authors make recommendations for standardizing the process	P	R
Welter and Reiff (1989) <sup>19</sup>	4	A checklist of information to be provided to the PACU nurse at handover	—	P	P
Zavalkoff et al. (2011) <sup>20</sup>	1	Development of an information checklist to standardize postsurgical patient transfers to the pediatric cardiac ICU, based on interviews with stakeholders	The medical, surgical, and total handover scores improved after implementation of the handover tool. No change in the current status and preoperative scores, handover duration, and high-risk events	R	

SBAR = Situation, Background, Assessment, Recommendation. A mnemonic for conveying patient information; PACU = postanesthesia care unit; OR = operating room; ICU = intensive care unit; FMEA = Failure Modes and Effects Analysis; I PASS the BATON = Introduction, Patient, Assessment, Situation, Safety concerns, Background, Actions, Timing, Ownership, Next. A mnemonic for conveying patient information; HFMEA = Healthcare Failure Modes and Effects Analysis; ITCAS = Information Transfer and Communication Assessment Tool for Surgery; PoHAT = Postoperative Handover Assessment Tool.

<sup>a</sup> Categories represent the type of journal article<sup>18</sup>:

- Category 1: Comprehensive intervention-based study
- Category 2: Intervention-based study
- Category 3: Preintervention study
- Category 4: Published opinions or reviews

<sup>b</sup> P = recommendations provided without any supporting empirical data; R = recommendations provided and supported by at least some empirical data.

was developed based on analogs drawn between postoperative patient handovers and other multiprofessional safety-critical processes, namely, racing team pit stops and aviation training. A checklist was created for the surgeon, anesthesiologist, and receiving ICU team to ensure that important patient information was communicated.<sup>10</sup> Two additional studies relied on outcomes of a Failure Modes and Effects Analysis and small-scale root cause analyses<sup>21</sup> and on interviews with expert care providers<sup>20</sup> to develop handover protocols and checklists. Interestingly, all 4 comprehensive intervention-based papers analyzed the same study population, pediatric cardiac patients. They all improved metrics of effectiveness (decreased technical errors and information omissions), efficiency (reduced handover duration or time to complete specific tasks), and perceived teamwork. However, the interventions did not significantly reduce high-risk events<sup>20</sup> or realized errors.<sup>21</sup> Their effects on patient outcomes were not evaluated.

Most of the papers provided quantitative or qualitative descriptions of current postsurgical care transfers. These cross-sectional studies present evidence of the many errors and deficiencies associated with handovers, their impact on patient safety, and the effect of handover practices on the work of care providers. Although most papers examined only 1 or 2 care settings, it is striking to note that many of their findings are consistently observed across multiple sites. Common barriers to safe, effective postoperative handovers include the incomplete transfer of information,<sup>7,9,10,20,22-30</sup> other communication issues (e.g., inaccurate information, lack of consistency and organization, information overload),<sup>4,6,7,11,22,25,28</sup> distractions (including performing clinical activities during the transfer of information),<sup>9,22,24-26,30,31</sup> inconsistent or incomplete teams,<sup>22,25</sup> absent or inefficient execution of clinical tasks,<sup>4,9,10,21</sup> and poor standardization.<sup>22,25,26</sup>

These barriers, and poor communication in particular, may affect patient outcomes. A study of surgical malpractice claims involving communication failures that resulted in patient harm found the transfer of care to be particularly vulnerable to breakdowns. At least 43% of communication breakdowns were associated with handovers, and 39% were associated with physical patient transfers.<sup>12</sup> In an analysis of incidents related to the intrahospital transfer of ICU patients, 36% of events involved the OR as the origin or destination of transport.<sup>13</sup> In PACUs, the second most common factor contributing to reported incidents was poor communication, associated with 14% of incidents.<sup>11</sup> Finally, postoperative patients were found to be at higher risk for complications or death when their surgical teams exhibited less briefing and information sharing during handover.<sup>6</sup> Although these findings do not establish a cause-and-effect relationship between poor handovers and decreased patient safety, they imply an association that warrants a more in-depth examination of postoperative transfer of care.

A number of authors developed tools to measure handover quality, e.g., for the purpose of evaluating the effectiveness of interventions. These tools are largely focused on information transfer,<sup>9,10,20,21,23,27,32</sup> but some also assess clinical task performance,<sup>9,10,21,23</sup> nontechnical skills,<sup>6,9,32</sup> and nursing satisfaction with handover quality.<sup>23</sup> Most tools are observational and involve assessing

**Table 2. Strategies for Safe and Effective Postoperative Handovers Consistently Identified in the Literature**

- Prepare monitor, alarms, equipment, and fluids before patient arrival
- Complete urgent care tasks before the verbal handover
- Set aside time for handover communication. Avoid performing other tasks during this time and, conversely, limit conversations while performing tasks
- Use the "sterile cockpit"—only patient-specific conversation or urgent clinical interruptions can occur during the handover
- All relevant members of the operating room and postoperative receiving teams should be present during the handover
- Only 1 care provider should speak at a time, with minimal distractions and interruptions
- Provide an opportunity to ask questions and voice concerns
- Document the handover
- Use supporting documentation, e.g., lab test results, anesthesia chart
- Use structured checklists to guide communication and ensure completeness of information. Use forms or reference cards as reminders
- Use protocols to standardize processes
- Provide formal team or handover training

whether certain pieces of information have been transferred or tasks have been executed. The extent to which their validity and reliability have been evaluated is variable.

Many of the papers included in this literature review recommend strategies for facilitating the different phases of postsurgical handovers and for quality improvement. A complete list is shown in Appendix 1. Some of these strategies are supported by quantitative and/or qualitative data and are repeatedly identified as important by several authors. They are presented in Table 2. Similarly, suggestions for patient information to be included in verbal or written handovers are outlined in Appendix 2, and those that are supported most extensively are summarized in Table 3.

## DISCUSSION

Our review of the literature on patient and knowledge transfers after surgery reveals that research in this area is still in its infancy. Although many studies examine current handover practices from various perspectives, few have tested approaches for improving them. These intervention-based studies suffer from small sample sizes (between 31 and 171 handovers, pre- and postintervention combined) and insufficient details about the solutions or methods used to evaluate them. Furthermore, they all focus on 1 study population, pediatric patients undergoing cardiac surgery. The perioperative and recovery teams caring for this patient population are typically small, consistent, and highly specialized, while the patients are often characterized by high complexity regarding invasive monitoring, IV vasoactive infusions, assisted ventilation, etc. Thus, the generalizability of the approach described in these studies is limited. In addition, no rigorous experimental designs (e.g., with randomized group assignments) have been performed to isolate the effects of interventions from extraneous factors. Perhaps more importantly, we identified only 1 study that



**Table 3. Postoperative Information Transfer Recommendations Consistently Identified in the Literature****Patient Information**

- Name
- Age
- Weight
- Allergies
- Diagnosis
- Procedure performed
- Condition
- Medical history

**Anesthesia Information**

- Type of anesthesia and anesthetic course
- Anesthesia complications
- Intraoperative medications, including dose and time
- IV fluids administered
- Blood products (type and amount)
- Estimated blood loss
- Transesophageal echocardiography/echocardiogram report

**Surgical Information**

- Surgical course
- Surgical site information, including dressings, tubes, drains, and packing
- Surgical complications and interventions
- Cardiopulmonary bypass (CPB)/circulatory arrest/cross-clamp/other procedure durations
- Problems weaning from CPB

**Current status**

- Assessment of hemodynamic stability

**Care plan**

- Anticipated recovery and problems
- Clear postoperative management plan
- Postoperative orders and investigations
- Monitoring plan and range for physiological variables
- Analgesia plan
- Plan for IV fluids, antibiotics, medications, deep venous thrombosis prophylaxis
- Plan for nasogastric tube and feeding

attempted to assess the impact of an intervention (handover protocol and checklist) on patient outcomes,<sup>33</sup> and this study was not sufficiently powered or adequately designed and analyzed to conclusively document an improvement in outcomes. However, checklists and team training, tools that have been shown to improve handover quality, have face validity, and their effectiveness in reducing patient morbidity and mortality has been demonstrated in other health care activities.<sup>34–37</sup> Rigorous study designs, adequate sample sizes, diverse study sites, and assessments of patient outcomes are needed to effectively evaluate approaches to improving postoperative handovers.

Other interesting questions arise regarding patient outcomes. For example, do patients with poor handovers do worse or, conversely, do unstable patients get poor handovers? This question is difficult to answer, and we found no studies that attempted to do so. Those most closely related include an observational study that showed that patients whose surgical teams exhibited less briefing and information sharing were at a higher risk for poor outcomes, even after adjusting for patients' risk category.<sup>6</sup> However, although it is possible that poor information exchange led to complications, the reverse is also possible (e.g., that providers concentrated on emergent patient care needs, rather than communication, during handovers). In another study, Catchpole et al.<sup>10</sup> found a positive relationship between patients' operative risk and information

omissions. It is possible that when patients are medically compromised, less information is shared about them. But other factors may also be responsible for omitting important information when handing over high-risk patients (e.g., if a particularly laconic surgeon performs specific procedures in complex patients). One reason why it is important to consider the patient safety implications of deficient handovers is the notion of opportunity cost, or the cost of the handover to providers (time expended), measured in terms of the value of other activities that are foregone to complete it. If we cannot demonstrate that inadequate handovers contribute to poor patient outcomes (or proxy measures of outcomes, such as medication errors), care providers may not recognize the benefit of such resource-intensive recommendations as ensuring the presence of all relevant team members, foregoing other activities during handover communication, and using checklists to guide discussions (Table 2).

Additional research questions regarding the characteristics of a good handover are worthy of attention. For example, what role does provider experience have in communicating important information? It may be that providers who are more experienced (or more familiar with each other's work practices) are able to communicate more succinctly than, for example, junior trainees, even though the same information is conveyed. Conversely, it is possible that experienced providers, who handover or receive patients on a daily basis, may incorrectly assume certain information ("this anesthesiologist always reverses neuromuscular blocking drugs, even if the reversal drug is not documented in the anesthesia record") or forget to share or request information. It would be interesting to test the utility of information transfer checklists for providers with different experience levels, with a special focus on the implications of assumptions and unspoken understandings.

In addition, it would be valuable to compare different information delivery methods, e.g., face-to-face, telephone, recorded, written, or electronic. Although verbal, face-to-face postoperative handovers are the norm in the studies we reviewed, simulation-based studies of shift-change handovers have shown that information retention was worst during verbal handovers compared with verbal with note taking and handovers using a printed handout.<sup>38,39</sup> It is also possible that multiple interactions, e.g., a review of the electronic record followed by a documented conversation with the delivering team, would provide the receiving team with a more comprehensive picture of the recovering patient. However, the impact on workflow entailed by such double-task handovers would need to be considered.

Related to these issues, research on electronic tools to support postoperative handovers is also needed. Such tools can facilitate handovers by extracting information from databases, thereby ensuring data accuracy, completeness, and timeliness.<sup>40,41</sup> Standardizing knowledge transfers using electronic health record-based systems can decrease the incidence of information errors and omissions and reduce adverse events.<sup>41–44</sup> However, our literature review identified only 2 studies that used information technology to facilitate handovers from the OR. In 1 study, the authors created various printed reports generated from the Anesthesia Information Management System records and distributed them to

different patient destinations (ICU, general ward, etc.). This report was not formally evaluated.<sup>45</sup> In another study, a document was created as part of the patient's electronic health record using provider-entered data, but its evaluation was similarly limited.<sup>33</sup> Another idea for future research is to assess the utility of providing PACU and ICU clinicians with access to intraoperative information (e.g., labs, anesthesia chart) via the electronic health record in real time. Such functionality would allow the clinicians to prepare for the patient's arrival and could increase handover efficiency, but the impact of such changes on workflow must also be considered.

Finally, further research is needed on the topic of sustainability. This topic has not been examined in the context of other types of patient handovers.<sup>16</sup> Only 1 of the papers we reviewed studied the feasibility and long-term effects of changes in postoperative handover practice.<sup>30</sup> This study found only partial compliance with a handover protocol initiated 3 years prior. Although attendance of team members was high, distractions were common and information delivery did not adhere to the protocol. Indeed, some elements of the protocol were inconsistently reported whereas other elements, also of clinical importance, but not included in the original protocol, were frequently discussed during the handover. (This positive change was labeled by the manuscript's authors as *user-centered innovation*.) In other quality improvement research, some studies have shown that compliance rates decrease after the initial period of implementation, whereas others have demonstrated successful change management.<sup>46–48</sup> Sustainable change is critical to high-quality patient care. It is important to understand how sustainability can be achieved, including overcoming economic, structural, and cultural barriers to success.

Many of the research questions discussed herein cannot be ethically or practically answered using randomized controlled trials, the "gold standard" of clinical investigation. Other, more feasible experimental designs may be required, such as the pragmatic trial. These trials compare 2 or more interventions in terms of their effectiveness in real-world practice, using broad eligibility criteria without blinding to treatment assignment. Thus, they sacrifice internal validity but gain generalizability.<sup>49</sup> A pragmatic trial might be possible by randomizing patients to different handover methods by hospital or surgical service. With a pilot study to estimate effect size, feasibility, and cost implications, such a trial could assess the impact of different interventions on patient outcomes and process measures. Simulation-based studies can be used to determine the characteristics of a good handover. Simulated patients can range from high-fidelity mannequins to written descriptions and have been used to compare information transfer methods, train in teamwork and communication, and study information loss in handovers.<sup>38,39,50,51</sup> Finally, both quantitative and qualitative observational studies can be valuable in describing current practice and many have been published on the topic of postoperative handovers.<sup>6,23,27,52</sup>

There are several limitations associated with our review of the literature. First, we elected to include all research on postoperative handovers, regardless of the patient population or destination unit. Thus, patients and settings ran the gamut from adults admitted to the PACU to infants admitted to the pediatric cardiac ICU. The level of complexity associated with the different types of handovers varied considerably, as did

the members of the delivering and receiving teams. However, all postsurgical handovers have some common characteristics, which, we believe, warranted their shared analysis: (1) they all involve the physical transfer of a patient in a vulnerable state, along with monitoring and clinical equipment; (2) upon arrival, the transfer of knowledge and care responsibility occurs between multiprofessional clinicians with different levels of experience, which contributes to a communication gap<sup>53</sup>; and (3) many of the information items to be transferred and tasks to be completed are common to all surgical patients.

Second, based on the body of literature, we compiled a list of recommendations for improving the physical and communication aspects of postoperative handovers. However, not all recommendations are supported empirically; and for those that are, the levels of evidence vary. This is attributable to the paucity of relevant studies and to limited efforts to validate findings, and points again to the need for more research to support recommendations and identify best practices in postoperative patient handovers.

Associated with this limitation is the challenge of adapting the recommendations to clinical practice. With respect to the knowledge transfer, for example, there are 74 elements listed in Appendix 2. Clearly, it is impractical to convey so much information in a brief handover, and some elements may be irrelevant for certain settings, operations, or patient populations. In addition, excessive information can act as a distracter and keep providers from other work, while providing little value to the receiving team. However, Table 3, which lists the best substantiated and most frequently recommended information requirements, is clearly not a blanket solution. For instance, some of the information requirements included in papers authored by nurses<sup>19,54</sup> were not included in most other papers, such as the patient's English comprehension, preoperative level of consciousness, or contact information for members of the OR team in case of problems. Thus, they were not added to Table 3. However, to the extent that this information allows nurses to better prepare and care for their patients, it should be included in postoperative handovers. Thus, each clinical practice must identify a minimal dataset that is essential for safe, effective patient care, and a methodology that promotes flexible standardization of the information content.

Finally, our search strategy may have led us to omit articles, for example, by not including all relevant terms in our list of keywords. We improved our search by using complementary strategies, including scanning literature reviews and bibliographies of pertinent articles. Although this approach minimized the likelihood of missing suitable articles, it did not eliminate the possibility. Related to this, a publication bias may have affected our findings. Because of the tendency to favor studies with positive results, studies with negative results may not have been published.

## CONCLUSIONS

More than 40 million patients undergo surgery in the United States annually<sup>b</sup> and are subsequently transferred to a PACU or ICU for recovery. According to our review of the literature, these transfers are characterized by poor teamwork and

<sup>b</sup> Anesthesia in the United States 2009. Available at: [aqihq.org/Anesthesia%20in%20the%20US%202019\\_10.pdf](http://aqihq.org/Anesthesia%20in%20the%20US%202019_10.pdf). Accessed January 19, 2012.



communication, patients arriving in a compromised state, unclear procedures, technical errors, unstructured processes, interruptions and distractions, lack of central information repositories, and nurse inattention because of multitasking. An association between poor-quality handovers and adverse events is also demonstrated, although causality cannot be proven.

Although the quality of research on postoperative handovers is variable and strong evidence is lacking, several recommendations are broadly supported. First, standardizing this process can improve patient care by ensuring information completeness and accuracy and increasing the efficiency of the patient transfer process. Handover standardization also addresses a Joint Commission national patient safety goal.<sup>c</sup> As part of this recommendation, the

use of checklists to guide communication and protocols to structure clinical activities is advocated. To ensure the attention of all team members, many authors advise completing urgent tasks before the information transfer, limiting conversations while performing tasks, and adopting the "sterile cockpit" approach, i.e., allowing only patient-specific discussions during the verbal handover. All relevant team members should be present during the handover, and each should have an opportunity to speak or ask questions. Finally, training in team skills and communication is also promoted in some publications. These recommendations have the potential to improve the quality of postoperative handovers and the safety of patients during this critical period. ■■

<sup>c</sup> The Joint Commission Accreditation Program: Hospital—National Patient Safety Goals. Available at [http://www.healthlawyers.org/SiteCollectionDocuments/Content/ContentGroups/Publications2/Health\\_Lawyers\\_Weekly2/Volume\\_3/Issue\\_25/JCAHO\\_guidance.pdf](http://www.healthlawyers.org/SiteCollectionDocuments/Content/ContentGroups/Publications2/Health_Lawyers_Weekly2/Volume_3/Issue_25/JCAHO_guidance.pdf). (p. 6; although this is not the original document). Accessed August 24, 2009.

## Appendix 1. Recommendations for Facilitating Postoperative Handovers

Process recommendation	Support for recommendation
<b>Before patient transport</b>	
Conduct a debrief in the OR in the presence of PACU/SICU nurses	Nagpal et al. (2010b) <sup>26</sup>
Preparation for transport should include patient and equipment checks (including oxygen in cylinders and battery life) and liaison with staff at the destination	Beckmann et al. (2004) <sup>13</sup>
Unconscious patients should be brought to the PACU breathing high-concentration inspired oxygen in the lateral position	Anwari (2002), <sup>23</sup> Nagpal et al. (2011) <sup>9</sup>
Patients should arrive hemodynamically stable, in no (or in mild) pain, and decently covered	Anwari (2002), <sup>23</sup> Nagpal et al. (2011) <sup>9</sup>
Put ventilator on test lung before patient arrival	Catchpole et al. (2007) <sup>10</sup>
Prepare monitor, alarms, equipment, and fluids before patient arrival	Catchpole et al. (2007), <sup>10</sup> Joy et al. (2011), <sup>24</sup> Nagpal et al. (2011) <sup>9</sup>
<b>During patient transport</b>	
A dedicated team should be available for patient transport. Team members should be familiar with the transportation of critically ill patients, skilled in airway management and resuscitation, patient monitoring and moving, and familiar with all equipment	Beckmann et al. (2004) <sup>13</sup>
Adequate monitoring of the critically ill patient during transport should include ECG, blood pressure, oxygen saturation, and, if ventilated, end-tidal carbon dioxide	Beckmann et al. (2004) <sup>13</sup>
Patient observations should be documented during transport	Beckmann et al. (2004) <sup>13</sup>
<b>Clinical care</b>	
Complete urgent care tasks before the verbal handover	Mistry et al. (2008), <sup>22</sup> Smith and Mishra (2010), <sup>31</sup> Welter and Reiff (1989) <sup>19</sup>
Identify a person in charge who will be responsible for coordinating the handover	Catchpole et al. (2007) <sup>10</sup>
Identify a person responsible for situation awareness at handover and for safety checks	Catchpole et al. (2007) <sup>10</sup>
Allocate tasks to people in specific roles	Catchpole et al. (2007) <sup>10</sup>
Allocate experienced nurses to assist nurses receiving complex patients to the SICU. Assistants can establish ventilation and chest drainage, complete documentation, and provide decision support	Currey et al. (2006) <sup>52</sup>
Minimize time patient is off ventilator or unmonitored	Catchpole et al. (2007) <sup>10</sup>
Check pumps, lines, equipment, drains, urine bag	Catchpole et al. (2007), <sup>10</sup> Nagpal et al. (2011) <sup>9</sup>
Place drains on suction	Catchpole et al. (2007), <sup>10</sup> Nagpal et al. (2011) <sup>9</sup>
Keep lines untangled	Catchpole et al. (2007) <sup>10</sup>
For orthopedic procedures, locate and mark a pulse distal to the surgical site for assessing the patient	Welter and Reiff (1989) <sup>19</sup>
Anesthesia providers should check initial vital signs and patient stability before leaving	Anwari (2002), <sup>23</sup> Smith and Mishra (2010) <sup>31</sup>
Anesthesia providers should return to the PACU to review their patients	Anwari (2002) <sup>23</sup>

(Continued)

## Appendix 1. (Continued)

Process recommendation	Support for recommendation
<b>Information transfer</b>	
Establish a positive working atmosphere	Manser et al. (2010) <sup>32</sup>
Take the awake patient's experience into consideration	Manser et al. (2010) <sup>32</sup>
Hand over information at the patient's bedside to assist in recall of information and to prompt questions	Currey et al. (2006) <sup>52</sup>
Provide sufficient time for handovers	Manser et al. (2010) <sup>32</sup>
Set aside time for handover communication. Avoid performing other tasks during this time and limit conversations while performing tasks	Amato-Vealey et al. (2008), <sup>54</sup> Catchpole et al. (2007), <sup>10</sup> Chen et al. (2010), <sup>57</sup> Currey et al. (2006), <sup>52</sup> Nagpal et al. (2010c), <sup>27</sup> Smith and Mishra (2010) <sup>31</sup>
Recognize the importance of halting communication to address patient care	Chen et al. (2010) <sup>57</sup>
Use the "sterile cockpit"—only patient-specific conversation or urgent clinical interruptions can occur during the handover	Chen et al. (2011), <sup>30</sup> Joy et al. (2011), <sup>21</sup> Mistry et al. (2008) <sup>22</sup>
All relevant members of the surgical and receiving teams should be present during the handover and each specialty should take turns speaking	Chen et al. (2011), <sup>30</sup> Kim et al. (2012), <sup>33</sup> Mistry et al. (2008), <sup>22</sup> Nagpal et al. (2010a), <sup>25</sup> Nagpal et al. (2010c) <sup>27</sup>
Only 1 care provider should speak at a time, with minimal distractions and interruptions	Catchpole et al. (2007), <sup>10</sup> Chen et al. (2010), <sup>57</sup> Joy et al. (2011), <sup>21</sup> Welter and Reiff (1989) <sup>19</sup>
Encourage cross-disciplinary discussions	Catchpole et al. (2007) <sup>10</sup>
Cultivate mutual respect	Mazzocco et al. (2009) <sup>6</sup>
Use verbal skills to convey information: speak clearly, structure information, emphasize key points, summarize, and separate fact from judgment	Manser et al. (2010), <sup>32</sup> Nestel et al. (2005) <sup>59</sup>
Provide an opportunity to ask questions and voice concerns	Amato-Vealey et al. (2008), <sup>54</sup> Chen et al. (2010), <sup>57</sup> Manser et al. (2010), <sup>32</sup> Mazzocco et al. (2009), <sup>6</sup> Mistry et al. (2008), <sup>22</sup> Smith and Mishra (2010) <sup>31</sup>
To verify that information was received, apply closed-loop communication, e.g., read back	Chen et al. (2010), <sup>57</sup> Greenberg et al. (2007) <sup>12</sup>
Important information should be communicated verbally	Anwari (2002), <sup>23</sup> Nagpal et al. (2010c) <sup>27</sup>
Document the handover	Kim et al. (2012), <sup>33</sup> Manser et al. (2010), <sup>32</sup> Nagpal et al. (2010b), <sup>26</sup> Nagpal et al. (2010c) <sup>27</sup>
Use supporting documentation, e.g., lab test results, anesthesia chart	Joy et al. (2011), <sup>21</sup> Manser et al. (2010), <sup>32</sup> Nestel et al. (2005) <sup>59</sup>
Confirm handover completion and readiness of the receiving team to accept responsibility for the patient	Catchpole et al. (2007), <sup>10</sup> Manser et al. (2010) <sup>32</sup>
<b>Quality Improvement</b>	
Use structured checklists to guide communication and ensure completeness of information. Use forms or reference cards as reminders	Amato-Vealey et al. (2008), <sup>54</sup> Catchpole et al. (2007), <sup>10</sup> Catchpole et al. (2010), <sup>56</sup> Kim et al. (2012), <sup>33</sup> McQueen-Shadfar and Taekman (2010), <sup>58</sup> Nagpal et al. (2010a), <sup>25</sup> Nagpal et al. (2010b), <sup>26</sup> Nagpal et al. (2010c), <sup>27</sup> Smith and Mishra (2010) <sup>31</sup>
Use protocols to standardize processes (such as preparation for transport and sequences of tasks)	Beckmann et al. (2004), <sup>13</sup> Catchpole et al. (2007), <sup>10</sup> Catchpole et al. (2010), <sup>56</sup> Greenberg et al. (2007), <sup>12</sup> Mistry et al. (2008), <sup>22</sup> Nagpal et al. (2010a) <sup>25</sup>
Computerize the handover by combining provider-entered notes with data extracted from electronic patient records	Kim et al. (2012), <sup>33</sup> Nagpal et al. (2010c) <sup>27</sup>
Provide formal team or handover training	Catchpole et al. (2007), <sup>10</sup> Catchpole et al. (2010), <sup>56</sup> Chen et al. (2010), <sup>57</sup> Mistry et al. (2008), <sup>22</sup> Smith and Mishra (2010) <sup>31</sup>

OR = operating room; PACU = postanesthesia care unit; SICU = surgical intensive care unit; ECG = electrocardiogram.

## Appendix 2. Recommendations for Information Content During Postoperative Handovers

Handover information recommendation	Support for recommendation
<b>Team Information</b>	
Names of participating providers	Amato-Vealey et al. (2008), <sup>54</sup> McQueen-Shadfar and Taekman (2010) <sup>58</sup>
Surgery and anesthesia contact information in case of problems	Kim et al. (2012), <sup>33</sup> Nagpal et al. (2010a), <sup>25</sup> Welter and Reiff (1989) <sup>19</sup>
<b>Patient Information</b>	
Name	Amato-Vealey et al. (2008), <sup>54</sup> Catchpole et al. (2007), <sup>10</sup> Joy et al. (2011), <sup>21</sup> Mazzocco et al. (2009), <sup>6</sup> Meyer-Bender et al. (2010), <sup>45</sup> Nagpal et al. (2011), <sup>9</sup> Welter and Reiff (1989) <sup>19</sup>
Identifiers	McQueen-Shadfar and Taekman (2010) <sup>58</sup>
Date of birth	Amato-Vealey et al. (2008), <sup>54</sup> Meyer-Bender et al. (2010) <sup>45</sup>
Age	Catchpole et al. (2007), <sup>10</sup> Joy et al. (2011), <sup>21</sup> Nagpal et al. (2011), <sup>9</sup> Welter and Reiff (1989), <sup>19</sup> Zavalkoff et al. (2011) <sup>20</sup>
Weight	Catchpole et al. (2007), <sup>10</sup> Joy et al. (2011), <sup>21</sup> Zavalkoff et al. (2011) <sup>20</sup>
Allergies	Nagpal et al. (2010a), <sup>25</sup> Nagpal et al. (2011), <sup>9</sup> Welter and Reiff (1989), <sup>19</sup> Zavalkoff et al. (2011) <sup>20</sup>
No code/do not resuscitate status	Welter and Reiff (1989) <sup>19</sup>
Diagnosis	Catchpole et al. (2007), <sup>10</sup> Joy et al. (2011), <sup>21</sup> Kim et al. (2012), <sup>33</sup> Mazzocco et al. (2009), <sup>6</sup> Meyer-Bender et al. (2010), <sup>45</sup> Nagpal et al. (2010c), <sup>27</sup> Nagpal et al. (2011), <sup>9</sup> Zavalkoff et al. (2011) <sup>20</sup>
Procedure performed	Amato-Vealey et al. (2008), <sup>54</sup> Anwari (2002), <sup>23</sup> Catchpole et al. (2007), <sup>10</sup> Chen et al. (2011), <sup>30</sup> Joy et al. (2011), <sup>21</sup> Kim et al. (2012), <sup>33</sup> Mazzocco et al. (2009), <sup>6</sup> McQueen-Shadfar and Taekman (2010), <sup>58</sup> Meyer-Bender et al. (2010), <sup>45</sup> Mistry et al. (2008), <sup>22</sup> Nagpal et al. (2010a), <sup>25</sup> Nagpal et al. (2011), <sup>9</sup> Welter and Reiff (1989) <sup>19</sup>
Condition	Catchpole et al. (2007), <sup>10</sup> Mazzocco et al. (2009), <sup>6</sup> Zavalkoff et al. (2011) <sup>20</sup>
Medical history	Amato-Vealey et al. (2008), <sup>54</sup> Chen et al. (2011), <sup>30</sup> Mazzocco et al. (2009), <sup>6</sup> McQueen-Shadfar and Taekman (2010), <sup>58</sup> Mistry et al. (2008), <sup>22</sup> Nagpal et al. (2010a), <sup>25</sup> Nagpal et al. (2010c), <sup>27</sup> Nagpal et al. (2011), <sup>9</sup> Welter and Reiff (1989), <sup>19</sup> Zavalkoff et al. (2011) <sup>20</sup>
Social history	Welter and Reiff (1989) <sup>19</sup>
Patient use of eyeglasses or a hearing aid	Welter and Reiff (1989) <sup>19</sup>
Patient's English comprehension	Welter and Reiff (1989) <sup>19</sup>
Previous operations	Chen et al. (2011), <sup>30</sup> Welter and Reiff (1989) <sup>19</sup>
<b>Preoperative information</b>	
Preoperative assessment	Anwari (2002), <sup>23</sup> McQueen-Shadfar and Taekman (2010), <sup>58</sup> Welter and Reiff (1989) <sup>19</sup>
Premedication	Anwari (2002), <sup>23</sup> Welter and Reiff (1989), <sup>19</sup> Zavalkoff et al. (2011) <sup>20</sup>
Preoperative ECG	Welter and Reiff (1989) <sup>19</sup>
Preoperative level of consciousness	Welter and Reiff (1989) <sup>19</sup>
<b>Anesthesia information</b>	
Type of anesthesia and anesthetic course	Amato-Vealey et al. (2008), <sup>54</sup> Catchpole et al. (2007), <sup>10</sup> Meyer-Bender et al. (2010), <sup>45</sup> Mistry et al. (2008), <sup>22</sup> Nagpal et al. (2010a), <sup>25</sup> Nagpal et al. (2011), <sup>9</sup> Smith and Mishra (2010), <sup>31</sup> Welter and Reiff (1989) <sup>19</sup>
Anesthesia complications	Joy et al. (2011), <sup>21</sup> Nagpal et al. (2010a), <sup>25</sup> Nagpal et al. (2011) <sup>9</sup>
Intraoperative medications, including dose and time	Amato-Vealey et al. (2008), <sup>54</sup> McQueen-Shadfar and Taekman (2010), <sup>58</sup> Meyer-Bender et al. (2010), <sup>45</sup> Nagpal et al. (2011), <sup>9</sup> Smith and Mishra (2010), <sup>31</sup> Welter and Reiff (1989), <sup>19</sup> Zavalkoff et al. (2011) <sup>20</sup>
Antibiotics	Catchpole et al. (2007), <sup>10</sup> Meyer-Bender et al. (2010) <sup>45</sup>
IV fluids administered	Amato-Vealey et al. (2008), <sup>54</sup> Catchpole et al. (2007), <sup>10</sup> Chen et al. (2011), <sup>30</sup> Joy et al. (2011), <sup>21</sup> Meyer-Bender et al. (2010), <sup>45</sup> Smith and Mishra (2010), <sup>31</sup> Welter and Reiff (1989), <sup>19</sup> Zavalkoff et al. (2011) <sup>20</sup>
Blood products (type and amount)	Catchpole et al. (2007), <sup>10</sup> Chen et al. (2011), <sup>30</sup> Joy et al. (2011), <sup>21</sup> Meyer-Bender et al. (2010), <sup>45</sup> Nagpal et al. (2010c), <sup>27</sup> Nagpal et al. (2011), <sup>9</sup> Zavalkoff et al. (2011) <sup>20</sup>
Estimated blood loss	Amato-Vealey et al. (2008), <sup>54</sup> Catchpole et al. (2007), <sup>10</sup> Chen et al. (2011), <sup>30</sup> Meyer-Bender et al. (2010), <sup>45</sup> Nagpal et al. (2010a), <sup>25</sup> Nagpal et al. (2010c), <sup>27</sup> Nagpal et al. (2011), <sup>9</sup> Smith and Mishra (2010), <sup>31</sup> Zavalkoff et al. (2011) <sup>20</sup>
Bleeding problems	Joy et al. (2011) <sup>21</sup>
Pain management method	Amato-Vealey et al. (2008), <sup>54</sup> Anwari (2002), <sup>23</sup> Smith and Mishra (2010) <sup>31</sup>
Tubes/lines/wires	McQueen-Shadfar and Taekman (2010), <sup>58</sup> Meyer-Bender et al. (2010), <sup>45</sup> Welter and Reiff (1989), <sup>19</sup> Zavalkoff et al. (2011) <sup>20</sup>
Endotracheal tube size	Joy et al. (2011), <sup>21</sup> Zavalkoff et al. (2011) <sup>20</sup>
Laryngoscopy grade	Zavalkoff et al. (2011) <sup>20</sup>
Intubation conditions	Meyer-Bender et al. (2010) <sup>45</sup>
Ventilation	Catchpole et al. (2007), <sup>10</sup> Chen et al. (2011), <sup>30</sup> Zavalkoff et al. (2011) <sup>20</sup>
Ventilation problems	Zavalkoff et al. (2011) <sup>20</sup>
Hemodynamics	Chen et al. (2011), <sup>30</sup> Joy et al. (2011) <sup>21</sup>
Hemodynamic problems	Zavalkoff et al. (2011) <sup>20</sup>
Electrolyte problems	Zavalkoff et al. (2011) <sup>20</sup>
Glucose problems	Zavalkoff et al. (2011) <sup>20</sup>
TEE/echocardiogram	Catchpole et al. (2007), <sup>10</sup> Joy et al. (2011), <sup>21</sup> Zavalkoff et al. (2011) <sup>20</sup>
Intraoperative ECG changes	Chen et al. (2011), <sup>30</sup> Welter and Reiff (1989), <sup>19</sup> Zavalkoff et al. (2011) <sup>20</sup>
Intraoperative positioning	Welter and Reiff (1989) <sup>19</sup>

(Continued)



## Appendix 2. (Continued)

Handover Information recommendation	Support for recommendation
Last lab values	Chen et al. (2011), <sup>30</sup> Meyer-Bender et al. (2010) <sup>45</sup>
Last clinical findings	Meyer-Bender et al. (2010) <sup>45</sup>
<b>Surgical Information</b>	
Surgical course	Anwari (2002), <sup>23</sup> Chen et al. (2011), <sup>30</sup> McQueen-Shadfar and Taekman (2010), <sup>58</sup> Nagpal et al. (2010a), <sup>25</sup> Nagpal et al. (2011) <sup>9</sup>
Surgical site information, including dressings, tubes, drains, and packing	Amato-Vealey et al. (2008), <sup>54</sup> Kim et al. (2012), <sup>33</sup> Mazzocco et al. (2009), <sup>6</sup> Nagpal et al. (2011), <sup>9</sup> Smith and Mishra (2010), <sup>31</sup> Welter and Reiff (1989) <sup>19</sup>
Significant intraoperative events	Amato-Vealey et al. (2008) <sup>54</sup>
Surgical complications and interventions	Amato-Vealey et al. (2008), <sup>54</sup> Anwari (2002), <sup>23</sup> Catchpole et al. (2007), <sup>10</sup> Nagpal et al. (2010a), <sup>25</sup> Nagpal et al. (2011), <sup>9</sup> Welter and Reiff (1989) <sup>19</sup>
New diagnosis, if different than original	Zavalkoff et al. (2011) <sup>20</sup>
CPB/circulatory arrest/cross-clamp/other procedure durations	Catchpole et al. (2007), <sup>10</sup> Chen et al. (2011), <sup>30</sup> Joy et al. (2011), <sup>21</sup> Meyer-Bender et al. (2010), <sup>45</sup> Zavalkoff et al. (2011) <sup>20</sup>
Problems weaning from CPB	Catchpole et al. (2007), <sup>10</sup> Joy et al. (2011), <sup>21</sup> Zavalkoff et al. (2011) <sup>20</sup>
<b>Current status</b>	
Current IV fluids and rate of administration	Welter and Reiff (1989), <sup>19</sup> Zavalkoff et al. (2011) <sup>20</sup>
Inotropes	Chen et al. (2011), <sup>30</sup> Joy et al. (2011) <sup>21</sup>
Airway and oxygenation status	Amato-Vealey et al. (2008), <sup>54</sup> Zavalkoff et al. (2011) <sup>20</sup>
Assessment of hemodynamic stability	Amato-Vealey et al. (2008), <sup>54</sup> Catchpole et al. (2007), <sup>10</sup> Nagpal et al. (2011), <sup>9</sup> Welter and Reiff (1989), <sup>19</sup> Zavalkoff et al. (2011) <sup>20</sup>
Pacing	Chen et al. (2011), <sup>30</sup> Zavalkoff et al. (2011) <sup>20</sup>
Thermal status	Amato-Vealey et al. (2008), <sup>54</sup> Welter and Reiff (1989) <sup>19</sup>
Urine output	Amato-Vealey et al. (2008), <sup>54</sup> Joy et al. (2011) <sup>21</sup>
Level of pain	Amato-Vealey et al. (2008) <sup>54</sup>
<b>Care plan</b>	
Anticipated recovery and problems	Catchpole et al. (2007), <sup>10</sup> Manser et al. (2010), <sup>32</sup> McQueen-Shadfar and Taekman (2010), <sup>58</sup> Nagpal et al. (2010a), <sup>25</sup> Smith and Mishra (2010), <sup>31</sup> Zavalkoff et al. (2011) <sup>20</sup>
Clear postoperative management plan	Anwari (2002), <sup>23</sup> Joy et al. (2011), <sup>21</sup> Manser et al. (2010), <sup>32</sup> Mazzocco et al. (2009), <sup>6</sup> McQueen-Shadfar and Taekman (2010), <sup>58</sup> Meyer-Bender et al. (2010), <sup>45</sup> Nagpal et al. (2010b), <sup>26</sup> Smith and Mishra (2010) <sup>31</sup>
Postoperative orders and investigations	Amato-Vealey et al. (2008), <sup>54</sup> Nagpal et al. (2010a), <sup>25</sup> Nagpal et al. (2010c), <sup>27</sup> Nagpal et al. (2011) <sup>9</sup>
Monitoring plan and range for physiological variables	Nagpal et al. (2010a), <sup>25</sup> Nagpal et al. (2010c), <sup>27</sup> Nagpal et al. (2011), <sup>9</sup> Smith and Mishra (2010), <sup>31</sup> Zavalkoff et al. (2011) <sup>20</sup>
Analgesia plan	Kim et al. (2012), <sup>33</sup> Nagpal et al. (2010a), <sup>25</sup> Nagpal et al. (2010c), <sup>27</sup> Nagpal et al. (2011) <sup>9</sup>
Plan for IV fluids, antibiotics, medications, deep venous thrombosis prophylaxis	Kim et al. (2012), <sup>33</sup> Nagpal et al. (2010a), <sup>25</sup> Nagpal et al. (2010c), <sup>27</sup> Nagpal et al. (2011), <sup>9</sup> Smith and Mishra (2010), <sup>31</sup> Welter and Reiff (1989) <sup>19</sup>
Needed blood	Nagpal et al. (2011) <sup>9</sup>
Plan for tubes and drains	Nagpal et al. (2010a), <sup>25</sup> Nagpal et al. (2011) <sup>9</sup>
Plan for nasogastric tube and feeding	Kim et al. (2012), <sup>33</sup> Nagpal et al. (2010a), <sup>25</sup> Nagpal et al. (2010c), <sup>27</sup> Nagpal et al. (2011) <sup>9</sup>
Positioning plan	Smith and Mishra (2010) <sup>31</sup>
Conditions for informing providers of a departure from normal patient status	Smith and Mishra (2010) <sup>31</sup>
Plan for contacting social services, speech and physical therapists	Kim et al. (2012) <sup>33</sup>
Plan for patient/caregiver education	Kim et al. (2012) <sup>33</sup>
Plan for emergency care	Kim et al. (2012) <sup>33</sup>

ECG = electrocardiogram; TEE = transesophageal echocardiogram; CPB = cardiopulmonary bypass.

## DISCLOSURES

**Name:** Noa Segall, PhD.

**Contribution:** This author helped design the study, conduct the study, analyze the data, and write the manuscript.

**Attestation:** Noa Segall approved the final manuscript.

**Name:** Alberto S. Bonifacio, BSN.

**Contribution:** This author helped design the study, conduct the study, and analyze the data.

**Attestation:** Alberto S. Bonifacio approved the final manuscript.

**Name:** Rebecca A. Schroeder, MD.

**Contribution:** This author helped design the study and analyze the data.

**Attestation:** Rebecca A. Schroeder approved the final manuscript.

**Name:** Atilio Barbeito, MD.

**Contribution:** This author helped analyze the data and write the manuscript.

**Attestation:** Atilio Barbeito approved the final manuscript.

**Name:** Dawn Rogers, BSN.

**Contribution:** This author helped analyze the data.

**Attestation:** Dawn Rogers approved the final manuscript.

**Name:** Deirdre K. Thornlow, RN, PhD.

**Contribution:** This author helped analyze the data and write the manuscript.

**Attestation:** Deirdre K. Thornlow approved the final manuscript.

**Name:** James Emery, PhD.

**Contribution:** This author helped analyze the data.

**Attestation:** James Emery approved the final manuscript.

**Name:** Sally Kellum, RN-BC, MSN.

**Contribution:** This author helped analyze the data.

**Attestation:** Sally Kellum approved the final manuscript.

**Name:** Melanie C. Wright, PhD.

**Contribution:** This author helped design the study and write the manuscript.

**Attestation:** Melanie C. Wright approved the final manuscript.



**Name:** Jonathan B. Mark, MD.

**Contribution:** This author helped design the study, conduct the study, analyze the data, and write the manuscript.

**Attestation:** Jonathan B. Mark approved the final manuscript. **This manuscript was handled by:** Sorin J. Brull, MD, FCARCSI (Hon).

#### ACKNOWLEDGMENTS

We thank Kathy Gage for her critical review of the manuscript.

#### REFERENCES

1. Jeffcott SA, Evans SM, Cameron PA, Chin GSM, Ibrahim JE. Improving measurement in clinical handover. *Qual Saf Health Care* 2009;18:272-6
2. Borowitz SM, Waggoner-Fountain LA, Bass EJ, Sledd RM. Adequacy of information transferred at resident sign-out (in-hospital handover of care): a prospective survey. *Qual Saf Health Care* 2008;17:6-10
3. Clancy CM. The importance of simulation: preventing hand-off mistakes. *AORN J* 2008;88:625-7
4. de Leval MR, Carthey JC, Wright DJ, Farewell VT, Reason JT. Human factors and cardiac surgery: a multicenter study. *J Thorac Cardiovasc Surg* 2000;119:661-72
5. Arora V, Johnson J, Lovinger D, Humphrey H, Meltzer D. Communication failures in patient sign-out and suggestions for improvement: a critical incident analysis. *Qual Saf Health Care* 2005;14:401-7
6. Mazzocco K, Petitti DB, Fong KT, Bonacum D, Brookey J, Graham S, Lasky RE, Sexton JB, Thomas EJ. Surgical team behaviors and patient outcomes. *Am J Surg* 2009;197:678-85
7. Mistry K, Landrigan C, Goldmann D, Bates DW. Communication error during post-operative patient hand off in the pediatric intensive care unit. *Crit Care Med* 2005;33:A12
8. Kitch B, Cooper J, Zapol W, Marder J, Karson A, Hutter M, Campbell E. Handoffs causing patient harm: a survey of medical and surgical house staff. *Jt Comm J Qual Patient Saf* 2008;34:563-70
9. Nagpal K, Abboudi M, Fischler L, Schmidt T, Vats A, Manchanda C, Sevdalis N, Scheidegger D, Vincent C, Moorthy K. Evaluation of postoperative handover using a tool to assess information transfer and teamwork. *Ann Surg* 2011;253:831-7
10. Catchpole KR, de Leval MR, McEwan A, Pigott N, Elliott MJ, McQuillan A, MacDonald C, Goldman AJ. Patient handover from surgery to intensive care: using Formula 1 pit-stop and aviation models to improve safety and quality. *Paediatr Anaesth* 2007;17:470-8
11. Kluger MT, Bullock MFM. Recovery room incidents: a review of 419 reports from the Anaesthetic Incident Monitoring Study (AIMS). *Anaesthesia* 2002;57:1060-6
12. Greenberg C, Regenbogen S, Studdert D, Lipsitz S, Rogers S, Zinner M, Gawande A. Patterns of communication breakdowns resulting in injury to surgical patients. *J Am Coll Surg* 2007;204:533-40
13. Beckmann U, Gillies DM, Berenholtz SM, Wu AW, Pronovost P. Incidents relating to the intra-hospital transfer of critically ill patients: an analysis of the reports submitted to the Australian Incident Monitoring Study in Intensive Care. *Intensive Care Med* 2004;30:1579-85
14. Australian Council for Safety and Quality in Health Care. Clinical Handover and Patient Safety: Literature Review Report, 2005
15. Cohen MD, Hilligoss PB. Handoffs in Hospitals: a Review of the Literature on Information Exchange While Transferring Patient Responsibility or Control. Ann Arbor, MI: University of Michigan, 2009
16. Wong MC, Yee KC, Turner P. A Structured Evidence-Based Literature Review Regarding the Effectiveness of Improvement Interventions in Clinical Handover. eHealth Services Research Group, ed. University of Tasmania, Australia: Australian Commission on Safety and Quality in Health Care, 2008
17. Kalkman CJ. Handover in the perioperative care process. *Curr Opin Anaesthesiol* 2010;23:749-53
18. Manser T, Foster S. Effective handover communication: an overview of research and improvement efforts. *Best Pract Res Clin Anaesthesiol* 2011;25:181-91
19. Welter ER, Reiff PA. Transferring patients from the OR: what the postanesthesia room nurse needs to know. *AORN J* 1989;50:1248-52
20. Zavalkoff SR, Razack SI, Lavoie J, Dancea AB. Handover after pediatric heart surgery: a simple tool improves information exchange. *Pediatr Crit Care Med* 2011;12:309-13
21. Joy BF, Elliott E, Hardy C, Sullivan C, Backer CL, Kane JM. Standardized multidisciplinary protocol improves handover of cardiac surgery patients to the intensive care unit. *Pediatr Crit Care Med* 2011;12:304-8
22. Mistry K, Jagers J, Lodge A, Alton M, Mericle J, Frush K, Meliones J. Using Six Sigma® methodology to improve hand-off communication in high-risk patients. In: *Advances in Patient Safety: New Directions and Alternative Approaches*. Rockville, MD: Agency for Healthcare Research and Quality, 2008
23. Anwari JS. Quality of handover to the postanaesthesia care unit nurse. *Anaesthesia* 2002;57:488-93
24. Smith AF, Pope C, Goodwin D, Mort M. Interprofessional handover and patient safety in anaesthesia: observational study of handovers in the recovery room. *Br J Anaesth* 2008;101:332-7
25. Nagpal K, Arora S, Abboudi M, Vats A, Wong HW, Manchanda C, Vincent C, Moorthy K. Postoperative handover: problems, pitfalls, and prevention of error. *Ann Surg* 2010;252:171-6
26. Nagpal K, Vats A, Ahmed K, Smith AB, Sevdalis N, Jonansson H, Vincent C, Moorthy K. A systematic quantitative assessment of risks associated with poor communication in surgical care. *Arch Surg* 2010;145:582-8
27. Nagpal K, Vats A, Ahmed K, Vincent C, Moorthy K. An evaluation of information transfer through the continuum of surgical care: a feasibility study. *Ann Surg* 2010;252:402-7
28. Entin EB, Lai F, Barach P. Training teams for the perioperative environment: a research agenda. *Surg Innov* 2006;13:170-8
29. Joy BF, Elliott E, Hardy C, Sullivan C, Backer CL, Kane JM. Standardized multidisciplinary protocol improves handover of cardiac surgery patients to the intensive care unit. *Pediatr Crit Care Med* 2011;12:304-8
30. Chen JG, Wright MC, Smith PB, Jagers J, Mistry KP. Adaptation of a postoperative handoff communication process for children with heart disease: a quantitative study. *Am J Med Qual* 2011;26:380-6
31. Smith AF, Mishra K. Interaction between anaesthetists, their patients, and the anaesthesia team. *Br J Anaesth* 2010;105:60-8
32. Manser T, Foster S, Gisin S, Jaekel D, Ummenhofer W. Assessing the quality of patient handoffs at care transitions. *Qual Saf Health Care* 2010;19:e44
33. Kim SW, Maturo S, Dwyer D, Monash B, Yager PH, Zanger K, Hartnick CJ. Interdisciplinary development and implementation of communication checklist for postoperative management of pediatric airway patients. *Otolaryngol Head Neck Surg* 2012;146:129-34
34. Pronovost P. Interventions to decrease catheter-related bloodstream infections in the ICU: the Keystone Intensive Care Unit Project. *Am J Infect Control* 2008;36:S171.e1-5
35. Haynes AB, Weiser TG, Berry WR, Lipsitz SR, Breizat AH, Dellinger EP, Herbosa T, Joseph S, Kibatala PL, Lapitan MC, Merry AF, Moorthy K, Reznick RK, Taylor B, Gawande AA; Safe Surgery Saves Lives Study Group. A surgical safety checklist to reduce morbidity and mortality in a global population. *N Engl J Med* 2009;360:491-9
36. Mann S, Marcus R, Sachs B. Lessons from the cockpit: how team training can reduce errors on L&D. *Contemp Ob Gyn*, January 2006:1-7
37. Neily J, Mills PD, Young-Xu Y. Association between implementation of a medical team training program and surgical mortality. *JAMA* 2010;304:1693-700

38. Bhabra G, Mackeith S, Monteiro P, Pothier DD. An experimental comparison of handover methods. *Ann R Coll Surg Engl* 2007;89:298–300
39. Pothier D, Monteiro P, Mooktiar M, Shaw A. Pilot study to show the loss of important data in nursing handover. *Br J Nurs* 2005;14:1090–3
40. Cheah LP, Amott DH, Pollard J, Watters DAK. Electronic medical handover: towards safer medical care. *Med J Aust* 2005;183:369–72
41. Petersen L, Orav E, Teich J, O'Neil A, Brennan T. Using a computerized sign-out program to improve continuity of in-patient care and prevent adverse events. *Jt Comm J Qual Improv* 1998;24:77–87
42. Van Eaton EG, Horvath KD, Lober WB, Rossini AJ, Pellegrini CA. A randomized, controlled trial evaluating the impact of a computerized rounding and sign-out system on continuity of care and resident work hours. *J Am Coll Surg* 2005;200:538–45
43. Hertzum M, Simonsen J. Positive effects of electronic patient records on three clinical activities. *Int J Med Inform* 2008;77:809–17
44. Raptis DA, Fernandes C, Chua W, Boulos PB. Electronic software significantly improves quality of handover in a London teaching hospital. *Health Informatics J* 2009;15:191–8
45. Meyer-Bender A, Spitz R, Pollwein B. The anaesthetic report: custom-made printouts from anaesthesia-information-management-systems using extensible stylesheet language transformation. *J Clin Monit Comput* 2010;24:51–60
46. Pronovost PJ, Goeschel CA, Colantuoni E, Watson S, Lubomski LH, Berenholtz SM, Thompson DA, Sinopoli DJ, Cosgrove S, Sexton JB, Marsteller JA, Hyzy RC, Welsh R, Posa P, Schumacher K, Needham D. Sustaining reductions in catheter related bloodstream infections in Michigan intensive care units: observational study. *BMJ* 2010;340:c309
47. Bauer MS. A review of quantitative studies of adherence to mental health clinical practice guidelines. *Harv Rev Psychiatry* 2002;10:138–53
48. Grol R, Wensing M, Eccles M. Improving Patient Care: The Implementation of Change in Clinical Practice. Oxford, UK: Elsevier, 2005
49. Ware JH, Hamel MB. Pragmatic trials: guides to better patient care? *N Engl J Med* 2011;364:1685–7
50. Berkenstadt H, Haviv Y, Tuval A, Shemesh Y, Megrill A, Perry A, Rubin O, Ziv A. Improving handoff communications in critical care: utilizing simulation-based training toward process improvement in managing patient risk. *Chest* 2008;134:158–62
51. Bogenstatter Y, Tschan F, Semmer N, Spychiger M, Breuer M, Marsch S. How accurate is information transmitted to medical professionals joining a medical emergency? A simulator study. *Hum Factors* 2009;51:115–25
52. Currey J, Browne J, Botti M. Haemodynamic instability after cardiac surgery: nurses' perceptions of clinical decision-making. *J Clin Nurs* 2006;15:1081–90
53. Leonard M, Graham S, Bonacum D. The human factor: the critical importance of effective teamwork and communication in providing safe care. *Qual Saf Health Care* 2004;13:i85–i90
54. Amato-Vealey E, Barba M, Vealey R. Hand-off communication: a requisite for perioperative patient safety. *AORN J* 2008;88:763–74
55. Botti M, Bucknall T, Cameron P, Johnstone MJ, Redley B, Evans S, Jeffcott S. Examining communication and team performance during clinical handover in a complex environment: the private sector post-anaesthetic care unit. *Med J Aust* 2009;190:S157–60
56. Catchpole K, Sellers R, Goldman A, McCulloch P, Hignett S. Patient handovers within the hospital: translating knowledge from motor racing to healthcare. *Qual Saf Health Care* 2010;19:318–22
57. Chen JC, Mistry KP, Wright MC, Turner DA. Postoperative handoff communication: a simulation-based training method. *Simul Healthc* 2010;5:242–7
58. McQueen-Shadfar L, Taekman J. Say what you mean to say: improving patient handoffs in the operating room and beyond. *Simul Healthc* 2010;5:248–53
59. Nestel D, Kneebone R, Barnet A. Teaching communication skills for handover: perioperative specialist practitioners. *Med Educ* 2005;39:1157



## GUIDELINES FOR PATIENT CARE IN ANESTHESIOLOGY

### Committee of Origin: Surgical Anesthesia

(Approved by the ASA House of Delegates on October 3, 1967, and last amended on  
October 19, 2011)

#### I. Definition of Anesthesiology

The guidelines for delineation of clinical privileges in Anesthesiology are detailed in a separate ASA document.

Anesthesiology is the practice of medicine with a primary focus on but not limited to:

- A. The preoperative, intraoperative and postoperative evaluation and treatment of patients who are rendered unconscious and/or insensible to pain and emotional stress during surgical, obstetrical, radiological therapeutic and diagnostic or other medical procedures;
- B. The protection and maintenance of life functions and vital organs (e.g., brain, heart, lungs, kidneys, liver, endocrine, skin integrity, nerve [sensory and muscular]) under the stress of anesthetic, surgical and other medical procedures;
- C. Monitoring and maintenance of acceptable physiology during the perioperative period;
- D. Diagnosis and treatment of acute, chronic and cancer-related pain;
- E. Clinical management of cardiac and pulmonary resuscitation;
- F. Evaluation of respiratory function and application of respiratory therapy;
- G. Management of critically ill patients;
- H. Conduct of clinical, translational, basic science and outcomes/best practice research;
- I. Supervision, teaching and evaluation of performance of both medical and paramedical personnel involved in perioperative care and cardiac and pulmonary resuscitation.
- J. Management and preservation of patient safety.

**II. Anesthesiologists' Responsibilities:** Anesthesiologists are physicians who have graduated from an accredited medical or osteopathic school and have successfully completed an approved residency in anesthesiology. Classically, this incorporates a clinical base year followed by 3 years of training in clinical Anesthesiology. Anesthesiologists may have had additional subspecialty training and certification in subspecialty areas such as critical care medicine, pain management, or hospice and palliative care. Other areas of additional training may also include, but are not limited, to neuroanesthesia and pediatric, obstetric, vascular, regional, transplant or cardiothoracic anesthesia. Additional certification in these areas may become required as determined by the subspecialty and/or the American Board of Anesthesiology. Anesthesiologists' responsibilities to patients include:

- A. Assessment of, consultation for and preparation of patients for anesthesia;
- B. Determination of the patient's medical status and developing and prescribing a plan of anesthesia care.
- C. Recording an assessment and an anesthetic plan on the patient's chart.
- D. Medical management of patients and the anesthetic for the planned procedures including obtaining consults as necessary.
- E. Postanesthetic evaluation and treatment;

---

## GUIDELINES FOR PATIENT CARE IN ANESTHESIOLOGY

- F. On-site medical direction of any nonphysician who participates in the delivery of anesthesia care to the patient. This includes, but is not limited to, anesthesiologist assistants as well as certified registered nurse anesthetists.
- G. Perioperative pain management.
- H. All aspects of pain management when treating non-surgical pain.
- I. Management of the hospitalized patient and/or critically ill patient when practicing hospital or critical care medicine.
- J. Management of perioperative patient safety.
- K. Operating suite, ambulatory surgery center, and practice management.
- L. Setting standards and policies for the administration of sedation and anesthesia and procedural sedation throughout hospitals and ambulatory surgery centers.

### III. Guidelines for Anesthesia Care:

- A. **The ASA has guidelines and advisories located on the ASA website ([www.asahq.org](http://www.asahq.org))**
- B. The same standards for and quality of anesthetic care should be available for:
  - 1. All patients, 24 hours a day, seven days a week;
  - 2. Emergency as well as elective patients;
  - 3. Obstetrical, medical and surgical patients.
- C. Preanesthetic evaluation and preparation means that an anesthesiologist before the delivery of anesthesia care, is responsible for:
  - 1. Reviewing the available medical record.
  - 2. Interviewing [if possible, certain circumstances may prevent (e.g., emergent surgery, coma, etc)] and performing a focused examination of the patient to:
    - a. Discuss the medical history, including previous anesthetic experiences and medical therapy.
    - b. Assess those aspects of the patient's physical condition that might affect decisions regarding perioperative risk and management.
  - 3. Ordering and reviewing pertinent available tests and consultations as necessary for the delivery of anesthesia care.
- D. Perianesthetic care means being responsible for:
  - 1. Re-evaluation of the patient immediately prior to induction;
  - 2. Premedication and psychological support of patients prior to anesthesia.
  - 3. Preparation and check of equipment, drugs, fluids and gas supplies;
  - 4. Appropriate monitoring of the patient;
  - 5. Selection and administration of anesthetic agents to render the patient insensible to pain, while providing a level of comfort and relaxation commensurate with the invasiveness and physiologic stress of the planned procedure;

---

**GUIDELINES FOR PATIENT CARE IN ANESTHESIOLOGY**

---

6. Support of life functions under the stress of anesthetic, surgical, obstetrical and radiological manipulations;
  7. Recording the pertinent events of the procedure.
- E. Postanesthetic care means:
1. Ensuring availability of nursing personnel and equipment as required for safe postanesthetic care;
  2. Ensuring transfer of care information pertinent to the patient's specific needs and ensuring a safe transition;
  3. Remaining with the patient as long as medically necessary and until the receiving health care provider has all the information needed to assume care;
  4. Ensuring that the patient is discharged from the postanesthesia care unit in accordance with policies established by the Department of Anesthesiology.
  5. Ensuring that the duration of surveillance in the postanesthesia care unit is determined by the status of the patient and the judgment of the anesthesiologist.
  6. Conducting a postanesthesia evaluation, assessing patients for sequelae from anesthetic interventions and arranging for appropriate follow-up.

**IV. Additional Areas of Expertise:**

- A. Resuscitation procedures
- B. Pulmonary care
- C. Critical care medicine
- D. Diagnosis and treatment of acute, chronic, and cancer-related pain
- E. Trauma and emergency care
- F. Management of cardiopulmonary bypass or bridges to care which include but are not limited to management of intra-aortic balloon pumps (IABP) or extra-corporeal membrane oxygenation (ECMO)
- G. Management of preadmission clinics for patients undergoing surgical, diagnostic or therapeutic procedures requiring care by an anesthesiologist
- H. Medical direction of day-of surgery and postanesthetic care units
- I. Perioperative medicine
- J. Transesophageal echocardiography
- K. Ultrasonography for regional anesthetics, vascular access as well as other patient physical assessments and procedures as required in perioperative period.
- L. Operating room management
- M. Perioperative performance improvement
- N. Regional anesthesia and analgesia
- O. Other specialized diagnostic or therapeutic procedures including but not limited to somatosensory or motor evoked potential monitoring and venovenous bypass

**GUIDELINES FOR PATIENT CARE IN ANESTHESIOLOGY**

**V. Quality Assurance:**

The anesthesiologist should participate in a planned program for evaluation of quality and appropriateness of the anesthetic care of patients and should participate in resolving identified problems.

## **GUIDELINES FOR EXPERT WITNESS QUALIFICATIONS AND TESTIMONY**

**Committee of Origin: Professional Liability**

**(Approved by the ASA House of Delegates on October 15, 2003, and last amended on  
October 16, 2013)**

### **PREAMBLE**

The integrity of the litigation process in the United States depends in part on the honest, unbiased, responsible testimony of expert witnesses. Such testimony serves to clarify and explain technical concepts and to articulate professional standards of care. The ASA supports the concept that such expert testimony by anesthesiologists should be readily available, objective and unbiased. To limit uninformed and possibly misleading testimony, experts should be qualified for their role and should follow a clear and consistent set of ethical guidelines. These guidelines apply to written opinions as well as testimony offered by experts.

### **A. EXPERT WITNESS QUALIFICATIONS**

1. The physician (expert witness) should have a current, valid and unrestricted license to practice medicine.
2. The physician should be board certified in anesthesiology or hold an equivalent specialist qualification.
3. The physician should have been actively involved in the clinical practice of anesthesiology at the time of the event and should have relevant clinical experience and knowledge in the clinical practice areas that are the subject of the proceeding.

### **B. EXPERT WITNESS ETHICAL GUIDELINES**

1. The physician's review of the medical facts should be truthful, thorough and impartial. The physician should not exclude any relevant information to create a view favoring either the plaintiff or the defendant.
2. The physician's testimony should reflect scientific evidence and accepted practice standards prevalent at the time of the event in question.
3. The physician should make a clear distinction between medical malpractice and adverse outcomes not necessarily related to negligent practice.
4. The physician should make every effort to assess whether the alleged substandard practice was causally related to the adverse outcome.
5. The physician's fee for expert testimony should relate to the time spent and in no circumstances should be contingent upon outcome of the claim.
6. The physician should be willing to submit such testimony for review.



Not Reported in F.Supp.2d, 2007 WL 1469047 (W.D.Pa.), 73 Fed. R. Evid. Serv. 591  
(Cite as: 2007 WL 1469047 (W.D.Pa.))

C

United States District Court,  
W.D. Pennsylvania.  
Dennis REEDY, Plaintiff,  
v.  
CSX TRANSPORTATION, INC., t/d/b/a CSX, De-  
fendant.

Civil Action No. 06-758.  
May 18, 2007.

Charles A. Frankovic, Pribanic & Pribanic, Pittsburgh,  
PA, for Plaintiff.

Anthony J. Rash, Dickie, McCamey & Chilcote,  
Pittsburgh, PA, for Defendant.

#### OPINION AND ORDER

FRANCIS X. CAIAZZA, U.S. Magistrate Judge.

##### I. OPINION

\*1 The parties' cross-motions to exclude the testimony of the others' liability experts (*see* Docs. 15 and 17) will be denied, consistent with the analyses below.<sup>FN1</sup>

FN1. Although there is little definitive case law on the issue of whether a motion to strike an expert is considered a non-dispositive matter subject to resolution by a magistrate judge, at least one court has expressly so held, and several others have suggested in passing the same. *Coppedge v. K.B.I., Inc.*, 2007 WL 397495, \*1 n. 1 (E.D.Tex. Feb. 1, 2007) (reviewing cases). Given the timeliness concerns raised by the parties' pending mediation on June 7, 2007, *see* Doc. 14, the undersigned will eschew the report and recommendation process and follow the law

permitting magistrate judge review. Importantly, the court notes that this is not a case where an unfavorable *Daubert* ruling is dispositive of the Plaintiff's claims. *Cf., e.g., Quinby v. Plumsteadville Family Practice, Inc.*, 907 A.2d 1061, 1070-71 (2006) (“[w]ith all but the most self-evident medical malpractice actions,” plaintiff “must provide a medical expert who will testify as to the elements of duty, breach, and causation”) (citation omitted).

#### BACKGROUND

In this diversity action, the Plaintiff Dennis Reedy claims negligence against the Defendant CSX for injuries sustained on his job at Keystone Iron & Metal Co. (“Keystone”). *See generally* Compl., attached to Notice of Removal (Doc. 1). Keystone handles and processes scrap metal and, on October 25, 2005, CSX delivered to it an empty open-top gondola car (“the Rail Car” or “the Car”). *See generally* Def.'s Br. (Doc. 18) at 1. After the Car was parked, and consistent with usual practices, Keystone employees began moving it to be spotted for loading. *Id.* at 3. The airbrakes, one of two braking systems on the Car, was disengaged, and the handbrake was applied to slow and stop the Car. *Id.* at 3, 4-5.<sup>FN2</sup> Once the Car was loaded, it was parked in an area having a downgrade slope of less than two percent, where it awaited pickup by CSX; again, it was secured by the handbrake. *See id.* (citing record evidence).

FN2. The parties are in agreement the airbrakes did not cause the accident described below, so that system is irrelevant for the purposes of this lawsuit.

The Rail Car began to roll, Mr. Reedy moved the truck he was operating into its path, and the Car collided with the truck, thereby injuring the Plaintiff. *See*

Not Reported in F.Supp.2d, 2007 WL 1469047 (W.D.Pa.), 73 Fed. R. Evid. Serv. 591  
(Cite as: 2007 WL 1469047 (W.D.Pa.))

*generally* Compl. at ¶ 14. According to his pleadings, Mr. Reedy took this action to prevent the Car from rolling into a public railroad crossing, *see id.* at ¶¶ 12-13, and the Defendant's liability expert does not question his judgment in this regard. *Cf.* discussions *infra*.

The parties' theories of causation are straightforward enough. CSX believes that the Plaintiff's co-worker, James Ramsey ("Mr. Ramsey"), misapplied the handbrake. *See generally* Def.'s Br. (Doc. 18) at 7; Expert Rpt. of Philip J. Daum, P.E. (filed as Ex. 4 to Doc. 15) at 5 ("[t]he rolling of the [C]ar ... could not have occurred unless the handbrake ... had not been properly applied").<sup>FN3</sup> The Plaintiff and his expert believe that mechanical failure(s) and/or improper maintenance of the Car's handbrake system proximately caused the accident. *See generally* Expert Rpt. of Bob R. Tucker (attached as Ex. 5 to Doc. 20) (handbrake slipped and brake shoes/pads "were badly worn," causing Car to roll).

FN3. Despite his co-worker's alleged negligence, the Plaintiff's employer, Keystone, has not been named as a defendant. This presumably is so given the operation of Pennsylvania's Workers' Compensation law. *See generally Farabaugh v. Pennsylvania Turnpike Comm'n*, 911 A.2d 1264, 1266 n. 1 (Pa.2006) (making same assumption in negligence case where employer was not sued).

Each party seeks to preclude the testimony of the other's liability expert, and their Motions are now ripe for adjudication.

## ANALYSIS

### A. The Defendant's Expert, Mr. Daum

The Plaintiff attacks Mr. Daum's reliance on his inspection of the Rail Car in November 2006, over one

year after the accident and following the Car's continued use for hundreds of miles. *See generally* Pl.'s Br. (Doc. 16) at 4. Counsel relies on the Pennsylvania common law doctrine of "remoteness," which allows the introduction of evidence regarding the condition of a physical object only if "accompanied by proof that it has not changed in the mean [time]." *See Ritson v. Don Allen Chevrolet*, 336 A.2d 359, 362 (Pa.Super.1975) (citations omitted). This doctrine parallels federal law requiring "substantial similarity" between an expert's experiment/testing conditions and those of the accident in suit. *See, e.g., Griffin v. Hickson*, 2002 WL 988006, \*4 (E.D.Pa. May 9, 2002) (citations omitted).

\*2 These inquiries are the "flip side" of one another, so the court need not make a choice-of-law determination. The question is whether Mr. Daum's report and anticipated testimony impermissibly rely on observations made in November 2006 regarding physical conditions of the Car that had substantially changed since the time of the accident.

The first component examined by Mr. Daum was the Car's handbrake housing, which contains gears with teeth. *See* Daum's Rpt. at 3. The expert relies on CSX maintenance records to conclude that no components in the housing were replaced after the accident. *Id.* He therefore posits that the gears were in the same (if not, the court observes, a further deteriorated) condition at the time of the inspection than when the accident occurred. *Id.* Based on his examination, Mr. Daum has opined:

The condition claimed by Mr. Ramsey, where he describes the handbrake skipping a tooth and the chain loosening, could not exist unless there was physical evidence, such as teeth missing from gears. No such physical evidence exists.

*Id.*

Not Reported in F.Supp.2d, 2007 WL 1469047 (W.D.Pa.), 73 Fed. R. Evid. Serv. 591  
(Cite as: 2007 WL 1469047 (W.D.Pa.))

The court agrees with the Defendant that, absent evidence of CSX's replacement of the handbrake housing components, Mr. Daum's examination would satisfy the "remoteness" and "substantial similarity" tests annunciated above. Simply put, if none of the subject parts were replaced, their condition could only have deteriorated over the course of the Car's additional use, not improved. The Plaintiff, however, questions the veracity of CSX's evidence:

[T]here is a lack of service documentation for the [C]ar during the time it was in service post-accident. Specifically, it was admitted during the deposition of [the] Defendant's expert that an annual brake test ... was performed during 2006, but no documentation [has been] provided by [CSX].... [T]o assume that no cogs[or] gears ... were replaced during this brake test requires the Court to take a leap of faith [and] assume that the [C]ar was in essentially the same condition in November of 2006 as it was [at the time of the accident].

See Pl.'s Br. in Opp'n (Doc. 20) at 3.<sup>FN4</sup>

FN4. Counsel also suggests that there exists an issue of fact regarding the potential presence of orange paint on the teeth of the gear in question. See Pl.'s Reply Br. (Doc. 22) at 4 n. 2. The Plaintiff relies on Mr. Daum's testimony that it was "possible" his inspection video revealed orange paint on the gear, suggesting the part had been replaced. See Dep. Tr. of P. Daum at 74 (attached as un-numbered Ex. to Doc. 22); *but see id.* (opining that discoloration of gear was result of "normal rust and grime"). Presumably, counsel theorizes that new gears are painted, and all of the paint would have been worn off an old gear. Even indulging the Plaintiff's theory, the presence of orange paint in November 2006 would be significant only if it was completely absent at the time of the accident. In any event, the "orange paint" the-

ory appears too tenuous to support the exclusion of Mr. Daum's testimony, especially if the Defendant can show to the court's satisfaction that any repairs to the Car would have been reflected in its maintenance records. See discussion *infra* in text.

Defense counsel appears to indicate that the 2006 annual brake test contemplated by the Plaintiff did not occur. See generally Def.'s Opp'n Br. (Doc. 19) at 5. The court cannot be sure, however, given the difference in terminology used by the parties. *Cf. id.* ("Contrary to [the] Plaintiff's intimations, the record is devoid of proof that a *single-car test* was performed" between time of accident and Mr. Daum's inspection) (emphasis added).

Also absent is an adequate explanation regarding the evidence upon which CSX relies to show a lack of replacement. The Defendant frequently cites its "AAR-CRB History" on the Car, but fails to provide background information regarding this report; nor does there appear any sworn testimony, on personal knowledge, that any repairs to the Car would, either by necessity or as a result of standard operating procedures, be reflected on the AAR-CRB History.<sup>FN5</sup>

FN5. The Defendant's submissions indicate that the "AAR" is the Association of American Railroads. See Doc. 18-9 at 2. The evidence does appear to show that the AAR provides a series of detailed rules, compliance codes and procedures, *See id.* The court is uncertain, though, whether the AAR's rules and/or protocols are mandatory, industry standard, tied to federal, state or local regulations or certification, *et cetera*.

\*3 These things said, the Plaintiff's argument begs the question of how CSX can "prove a negative," namely, that the gear housing components were not replaced despite the lack of any evidence they were. In



Not Reported in F.Supp.2d, 2007 WL 1469047 (W.D.Pa.), 73 Fed. R. Evid. Serv. 591  
(Cite as: 2007 WL 1469047 (W.D.Pa.))

the court's view, this could be established by the sworn statement(s) of an appropriate CSX representative stating on personal knowledge that, if any repairs were made to the Rail Car, they would be reflected in the AAR-CRB History or some other existing documentation. If Defense counsel is capable of producing such evidence, CSX's failure to provide documentation regarding a purported "annual brake test" in 2006 would be immaterial.

In an effort to resolve the matter before the June 7th mediation in this case, the Defendant will be ordered to submit such an affidavit (if it can) within eleven (11) days of this Order. Presuming the submission eliminates reasonable doubt regarding whether the Car's handbrake housing components were replaced, Mr. Daum will be permitted to offer opinions and testimony based on his November 2006 inspection. Otherwise, and likely after the mediation, the court will order an evidentiary hearing to make a factual determination regarding whether replacements were made.<sup>FN6</sup>

FN6. Although the current rulings are neither tentative nor advisory, they are being made now to provide guidance for the purposes of the parties' mediation. If, based on the analyses herein, portions of the liability experts' reports or testimony should be stricken or precluded at trial, these matters can be later revisited in the event mediation fails.

Next is the issue of the Rail Car's brake "shoes" and/or "pads." <sup>FN7</sup> CSX concedes that two of the Car's eight brake shoes were replaced the day after the accident, and that the replaced shoes possessed brake pad material of a thickness at or less than the required industry standard of 3/8". See Def.'s Opp'n Br. at 5, 10. On this evidence alone, any testimony of Mr. Daum relying on the condition of the brake pads, post-accident, fails the "remoteness" and "substantial similarity" tests.

FN7. On a rail car, brake shoes and pads do not appear to function as part of separate brake systems as they do in automobiles. Compare website at <http://www.familycar.com/brakes.htm#Disc%20Brake> (in an automobile, "[t]he typical brake system consists of disk brakes in front," which utilize brake pads, and "drum brakes in the rear," which utilize brake shoes) with, e.g., Def.'s Opp'n Br. at 10 ("With regard to the two replaced brake shoes [on the Car], it is undisputed that both possessed brake pad material [whose] thickness was 3/8" or less."). While the undersigned does not pretend to possess expertise on the matter, the important point is that the thickness of the Car's brake pads has some interrelationship with CSX's post-accident replacement of brake shoes. See discussion *infra* in text.

This does not end the inquiry, however, because the expert's report does *not* appear to rely on the condition of the brake pads at the time of the November 2006 inspection. See Daum's Rpt. at 4-5. Rather, Mr. Daum relies on the fact witness testimony of Mr. Ramsey and others to assert that the thickness of the brake pads still should have prevented the Car from rolling. *Id.* ("where a brake shoe's surface area has [any] remaining composition material, it is still fully effective in braking a car"). Irrespective of how convincing a jury may find this opinion, the Plaintiff has not shown it impermissible under *Daubert* or Federal Rule 702, nor does it implicate the doctrines of remoteness or substantial similarity.

As discussed further below, the law is clear that neither party may filter fact evidence and testimony through its expert merely to lend credence to the same. See, e.g., *Nimely v. City of New York*, 414 F.3d 381, 398 (2d Cir.2005) (courts should disallow expert testimony offered to "improperly bolster the account[s]

Not Reported in F.Supp.2d, 2007 WL 1469047 (W.D.Pa.), 73 Fed. R. Evid. Serv. 591  
(Cite as: 2007 WL 1469047 (W.D.Pa.))

given by the fact witnesses”; party cannot use expert opinion to expound upon “the credibility of trial testimony from crucial fact witnesses”) (citations omitted); *S.E.C. v. Lipson*, 46 F.Supp.2d 758, 763 (N.D.Ill.1998) (under *Daubert*, “helpfulness” requirement dictates that “[e]xpert testimony may not be used merely to repeat or summarize what the jury independently has the ability to understand”; “expert testimony must not be allowed to cross over the line of helpfulness and ... invade the quintessential jury function of determining the credibility of witnesses”) (citation omitted). While Mr. Daum skirts the line in this regard <sup>FN8</sup> (and the Plaintiff’s expert arguably jumps over it with both feet <sup>FN9</sup>), this is a separate issue from “remoteness,” and the Plaintiff’s objection is without merit.

FN8. Compare Daum’s Rpt. at 4 (“There is no objective proof that there was any type of gapping between the brake shoes and the wheels.”) with Dep. Tr. of J. Ramsey (filed under Doc. 15-6) at 50 (post-accident condition of two brake pads would allow someone to “probably slide a paper envelope” between those pads and wheels).

FN9. See Tucker’s Rpt. at 3 (“Mr. Ramsey was well qualified to determine if the hand-brake was working [im]properly based on his many prior years of railroad industry employment.”).

\*4 Last is Mr. Daum’s opinion that, based on his November 2006 inspection, “the slack adjuster properly lengthened and shortened to maintain proper spacing of the brake shoes adjacent to the wheels.” Daum’s Rpt. at 4. Plaintiff’s counsel represents:

As stated by both Messrs. Daum and Tucker, *brake shoe thickness* directly [a]ffects piston travel length, and also is critical in determining whether the slack adjuster is functioning properly ....

See Pl.’s Reply Br. at 3 (citing record evidence, emphasis added). Having reviewed the evidence cited by counsel, the court possesses insufficient expertise to determine whether a slack adjuster’s functioning indeed is affected by brake pad thickness. Assuming it is, Mr. Daum’s post-accident examination of the slack adjuster would be too “remote” given CSX’s admitted replacement of two brake shoes the day after the accident. In light of the court’s inability to determine whether the November 2006 testing of the slack adjuster reflected condition(s) substantially similar to ones existing at the time of the accident, an evidentiary hearing is necessary to determine the admissibility of Mr. Daum’s testimony in this regard.<sup>FN10</sup>

FN10. Normally, it would be the Defendant’s burden to demonstrate substantial similarity. See generally *Hall v. United Ins. Co. of Amer.*, 367 F.3d 1255, 1261 (11th Cir.2004) (“[t]he burden of laying the proper foundation for the admission of expert testimony is on the party offering the expert”) (citations and internal quotations omitted). Here, though, it is the Plaintiff who has failed to sufficiently explain the interrelationship between the brake pads and the slack adjuster, despite representations in his brief that they exist and are significant. As for the potential evidentiary hearing regarding the replacement of handbrake housing components, this is appropriate given the Plaintiff’s calling upon the Defendant to further prove a negative. See generally *U.S. v. Frazier*, 387 F.3d 1244, 1274 n. 4 (11th Cir.2004) (“the procedural handling of an objection to proposed expert testimony,” including whether to have evidentiary hearing, “is a matter committed to the trial court’s discretion”) (citation omitted).

As for the remaining portions of Mr. Daum’s report, the Plaintiff has not shown how they implicate

Not Reported in F.Supp.2d, 2007 WL 1469047 (W.D.Pa.), 73 Fed. R. Evid. Serv. 591  
(Cite as: 2007 WL 1469047 (W.D.Pa.))

the remoteness and/or substantial similarity standards. Otherwise, counsel has failed to level a meaningful *Daubert* challenge, and there is no basis for rejecting the remainder of the report.

#### **B. The Plaintiff's Expert, Mr. Tucker**

In seeking to preclude this expert's testimony, the Defendant argues that he has "failed to employ any scientific or technical method or procedure" in support of his opinions. Def.'s Br. at 9. Counsel also presents two somewhat related themes: (1) Mr. Tucker has not supported his causation theory with "any testing or hands-on operation of the railcar's handbrake" components; and (2) the expert has failed to account for an obvious alternative explanation for the accident, namely Mr. Ramsey's failure to properly set the handbrake. *See generally* Def.'s Br. at 6-7.

The problem with the Defendant's position, however, is that it demands too much of Mr. Tucker's opinions. The expert is *not* required to demonstrate, for example, that Mr. Ramsey was truthful and un-mistaken in testifying that the handbrake "slipped" when he attempted to set it. *Cf. generally* Ramsey's Rpt. at 3. To the contrary, Federal Rule of Evidence 703 permits an expert to "rely on facts from firsthand knowledge or observation, information [to be] learned at the hearing or trial, and [even] facts learned out of court." *Stecyk v. Bell Helicopter Textron, Inc.*, 295 F.3d 408, 414 (3d Cir.2002) (emphasis added). Once the expert has identified a "factual foundation in the record," which Mr. Ramsey's sworn statements provide here, "the burden of exploring [the expert's] facts and assumptions" falls on "opposing counsel [through] cross-examination." *Id.* (citations omitted).

\*5 In essence, both experts in this case are attempting to do the same thing. Based on facts in the record (and, in Mr. Daum's case, his November 2006 inspection to some degree), they are offering specialized knowledge and experience to state opinions regarding the most likely cause of the accident. Under

Rule 703, Mr. Tucker's decision to decline inspection of the car, over one year after the accident occurred, does not make his opinions any less admissible than Mr. Daum's. *See discussion supra* (expert may rely on "firsthand ... observation" or "information learned at the hearing or trial"). Nor does the rule requiring experts to exclude obvious alternative explanations viti-ate Mr. Tucker's permissible use of facts in the record to support one of the only two possible causes identified by the experts (*i.e.*, mechanical failure versus human error). And while Mr. Daum's later examination of the handbrake housing components, if admissible, certainly would undermine Mr. Ramsey's testimony that the handbrake "slipped," this goes to the fact witness' credibility and is for the jury to weigh; not the court in its "gatekeeper" role under *Daubert*.

These conclusions extend to the Defendant's arguments regarding the Car's worn brake pads and the excessive brake piston travel. Although counsel questions Mr. Ramsey's testimony regarding brake pad thickness, *see* Def.'s Br. at 11, CSX must concede that at least two of the shoes were worn to 3/8" inches or less, in excess of industry standard. *See discussion supra; see also* Dep. Tr. of J. Ramsey at 50 (inspection just after accident revealed that one "could probably slide a paper envelope" between two pads and their wheels, and two other pads "were worn down real bad [sic]"). In addition, the Plaintiff's expert has opined based on his specialized knowledge and experience that worn brake pads cause the cylinder piston travel to extend beyond safe limits. *See, e.g.*, Tucker's Rpt. at 4. There exists some factual basis in the record to support this opinion, and Rule 703 dictates that the Defendant's challenges are properly addressed through cross-examination rather than a finding of non-admissibility. *See discussion supra*.

Finally are CSX's general arguments regarding the alleged lack of scientific procedure and/or methodology to support Mr. Tucker's opinions. *See generally* Def.'s Br. at 8. While the Defendant's brief makes



Not Reported in F.Supp.2d, 2007 WL 1469047 (W.D.Pa.), 73 Fed. R. Evid. Serv. 591  
(Cite as: 2007 WL 1469047 (W.D.Pa.))

reference to the Supreme Court's decision in *Kumho Tire Co., Ltd. v. Carmichael*, 526 U.S. 137 (1999), see *id.* at 7, counsel's arguments do not account for the decision's recognition that different considerations arise within the context of non-scientific experts. Through its reading of *Kumho*, the Third Circuit Court has recognized that "*Daubert's* list of specific factors neither necessarily nor exclusively applies to all experts ... in every case." *U.S. v. Davis*, 397 F.3d 173, 178 (3d Cir.2005). Indeed, the *Daubert* factors are "often ... of little use in evaluating non-scientific expert testimony," see *id.*, and where appropriate, the "relevant reliability concerns may focus upon personal knowledge or experience." *U.S. v. Ford*, 481 F.3d 215, 219 n. 5 (3d Cir.2007) (quoting *Kumho* ).

\*6 In this case, both experts rely on their impressive personal knowledge and experience in the railroad industry. See Pl.'s Opp'n Br. at 5 (Mr. Tucker has worked on railroad since he was 17, and has 30 years of investigation experience regarding accidents involving train movement); Appendix B to Daum's Rpt. (expert's curriculum vitae, revealing 24 years of mechanical engineering experience in, among other things, railcar design including brake systems). The court has little difficulty concluding that these experts' specialized knowledge and experience lend reliability to their opinions, at least to the extent contemplated above. See, e.g., *Betterbox Commc'ns Ltd. v. BB Techs., Inc.*, 300 F.3d 325, 328-29 (3d Cir.2002) (district court did not err in allowing expert testimony based on his "personal knowledge [and] experience" rather than "a methodology that satisfie[d] the *Daubert* factors"; expert's "practical experience sufficed under [the] liberal test" of whether he "possess[ed] skill or knowledge greater than the average layman") (citations omitted, some internal quotations in original). Which expert's permissible opinions are more persuasive is for the jury to decide. See, e.g., *Fillebrown v. Steelcase, Inc.*, 2003 WL 1191162, \*3 (3d Cir. Feb. 24, 2003) ("*Daubert* does not set up a test of which opinion has the best foundation," and "[i]t [is] appropriate for the jury to determine which of

the experts' opinions [is] the most persuasive") (citing and quoting binding published Third Circuit precedent).

For all of the reasons stated above, the court enters the following:

## II. ORDER

The parties' cross-Motions to exclude the testimony of liability experts (**Docs. 15 & 17**) are **DENIED**, consistent with the analyses in the above Opinion. In addition, the Defendant may submit, within eleven (11) days of the date of this Order, the affidavit of an appropriate CSX representative stating on personal knowledge that, if repairs were made to the Rail Car's handbrake housing, they would be reflected in the AAR-CRB History or some other existing documentation.

THESE THINGS ARE SO ORDERED.

W.D.Pa., 2007.

Reedy v. CSX Transp., Inc.

Not Reported in F.Supp.2d, 2007 WL 1469047  
(W.D.Pa.), 73 Fed. R. Evid. Serv. 591

END OF DOCUMENT



Westlaw.

Page 1

Not Reported in F.Supp.2d, 2010 WL 3222137 (W.D.Pa.)  
(Cite as: 2010 WL 3222137 (W.D.Pa.))

**H**

Only the Westlaw citation is currently available.

United States District Court,  
W.D. Pennsylvania.

Charles JACKSON, Plaintiff,

v.

The CITY OF PITTSBURGH, PENNSYLVANIA,  
Timothy Kreger, Mark Goob, James Joyce, Gregory  
Woodhall, Defendants.

Civil Action No. 07-111.  
Aug. 13, 2010.

West KeySummaryEvidence 157  508

157 Evidence

157XII Opinion Evidence

157XII(B) Subjects of Expert Testimony

157k508 k. Matters Involving Scientific or  
Other Special Knowledge in General. Most Cited  
Cases

In a § 1983 action alleging excessive force regarding arrest of motorist, expert witness's opinions regarding alleged misuse of narcotics officers, in plain clothes and unmarked vehicles, to make traffic stops were not relevant. The propriety of the traffic stop was not at issue in the case. The disputed issues at trial were the reasonableness of the inventory search of motorist's car, whether there was probable cause to arrest motorist for disorderly conduct or resisting arrest or both, and the reasonableness of the force used against motorist during the arrest. U.S.C.A. Const.Amend. 4; 42 U.S.C.A. § 1983; Fed.Rules Evid.Rule 702, 28 U.S.C.A.

Bonnie L. Kift, Law Office of Bonnie L. Kift, Ligonier, PA, for Plaintiff.

Michael E. Kennedy, City of Pittsburgh, Department of Law, Bryan Campbell, Pittsburgh, PA, for Defendants.

#### **MEMORANDUM OPINION**

NORA BARRY FISCHER, District Judge.

#### **I. INTRODUCTION/RELEVANT PROCEDURE**

\*1 This is a civil rights case brought by Plaintiff, Charles Jackson, against Defendants, the City of Pittsburgh, Pennsylvania, and officers Timothy Kreger, Mark Goob, James Joyce and Gregory Woodhall, arising from the officers' arrest of Plaintiff on November 2, 2001 and the subsequent incarceration of him after a traffic stop in the Homewood section of Pittsburgh.<sup>FN1</sup> This case is set for a trifurcated jury trial on Plaintiff's § 1983 claims, commencing with jury selection on August 23, 2010. The matters to be tried are: first, Plaintiff's § 1983 claims asserting that his Fourth Amendment rights were violated by the defendant officers for allegedly conducting an unreasonable search of his vehicle, unlawfully arresting him, and using excessive force against him while effectuating his arrest; second, Plaintiff's *Monell* claim against the City of Pittsburgh; and, third, Plaintiff's claims for damages. Presently before the Court are Defendants' motion in limine seeking to preclude the testimony of James E. Baranowski<sup>FN2</sup> as an expert witness at trial (Docket No. 126), their brief in support of same (Docket No. 127), Plaintiff's brief in opposition and response (Docket No. 145, 149) as well as Baranowski's expert report (Docket No. 76) and subsequently submitted affidavits (Docket Nos. 87-5, 87-6, 151).

FN1. A more detailed factual summary of the events of this case can be found in the Court's Memorandum Opinion on Defendants' motion for summary judgment. (See Docket No. 98). The Court has also issued three Memorandum Orders limiting the parties' evidence

Not Reported in F.Supp.2d, 2010 WL 3222137 (W.D.Pa.)  
(Cite as: 2010 WL 3222137 (W.D.Pa.))

at trial. (See Docket Nos. 165, 166, 167).

FN2. Baranowski previously appeared as a Plaintiff in two cases before this Court, both styled *Baranowski v. Waters et al.*, at Civil Action Numbers 05-1379 and 08-544, which was disclosed to counsel during a telephone conference on July 7, 2009. (Docket No. 77). The parties were given an opportunity to object to the Court's continuing to preside over this matter, but no objections were made. (See text only entry July 17, 2009).

The Court heard oral argument from counsel as to Defendants' Motion during the Pretrial Conference on June 16, 2010 (Docket No. 164, 168) and a *Daubert* hearing <sup>FN3</sup> was held during which Baranowski was examined on August 2, 2010 (Docket No. 190). Plaintiff's counsel withdrew a request for further argument on the motion subsequent to the *Daubert* hearing but the Court permitted supplemental briefing. (Text Order 8/6/10). Defendants filed their supplemental brief on August 10, 2010 (Docket No. 195) and Plaintiff filed his supplement brief on August 11, 2010 (Docket No. 197). Defendants' Motion is now fully briefed and ripe for disposition.

FN3. The *Daubert* hearing has yet to be fully transcribed. However, the trial in this matter is set for August 23, 2010 and the rulings set forth herein are needed for trial preparation purposes. Therefore, the Court bases its opinion on the evidence presented at the *Daubert* hearing but without citations to the hearing transcript.

For the following reasons, Defendants' Motion [126] is granted, in part and denied, in part. Baranowski will be permitted to testify as an expert on certain issues at trial; however, his testimony will be limited as set forth below.

## II. BACKGROUND

Plaintiff's proffer of Baranowski's testimony consists of his Report (Docket No. 76), his subsequently submitted affidavits (Docket Nos. 87-5, 87-6, 151) and his testimony at the *Daubert* hearing on August 2, 2010.

### A. Baranowski's Qualifications

Baranowski is a former police officer and is proffered by Plaintiff as an expert in the use of force by the police officers against Plaintiff in this case. (Docket No. 76). Baranowski was a member of the Pennsylvania State Police from 1986 through 2003, and a supervisor since 1992. (Docket No. 76-16; Docket No. 151 at ¶ 1). He attained the ranks of patrol commander, station commander and special projects supervisor. (Docket No. 151 at ¶ 1). In these roles, he has had extensive field experience in police actions, including traffic stops, drug raids, undercover work, street busts and saturation patrols. (*Id.*). He has also acted as a private consultant on police use of force, and police procedures cases, has trained various police departments in Southwestern Pennsylvania in use of force, force justification, officer safety, defensive tactics, and other topics, and has taught these subjects at the Municipal Police Officer's Education and Training Commission, Penn State University, Westmoreland Community College, California University of Pennsylvania and Indiana University of Pennsylvania. (*Id.*).

\*2 Baranowski's consulting experience is largely related to accident reconstruction and, indeed, he fashions himself a "Collision Reconstruction Specialist" on his letterhead and website. However, he testified that he has been retained as an expert in six use of force cases, and has submitted expert reports in those cases, although he has yet to testify or be qualified as an expert in any of such case because those matters have settled.

Not Reported in F.Supp.2d, 2010 WL 3222137 (W.D.Pa.)  
(Cite as: 2010 WL 3222137 (W.D.Pa.))

*B. Baranowski's Opinions*

In support of his opinions, Baranowski reviewed the Pittsburgh Office of Municipal Investigation Report as to the incident, the Office of Municipal Investigation ("OMI") statements of Plaintiff and the Defendant officers, the officers' respective personnel files, and the relevant police reports. (Docket No. 76). He also reviewed the relevant Pittsburgh Bureau of Police Orders and Policies, and testified that he considered additional sources that he did not cite in his report, including: the Commission on Accreditation for Law Enforcement Agencies, Inc. ("CALEA") standards and certain provisions of the Pennsylvania Vehicle Code and Crimes Code. (*Id.*). He further testified that he did not review the Defendant officers' arrest records or traffic incident reports, or the City of Pittsburgh Narcotics Officers' Handbook.

*i. Traffic Stop*

Baranowski offers a number of opinions regarding the initial traffic stop wherein the four police officers stopped Jackson for the traffic violation of making a turn without using a signal. (*Id.*). He first opines that because the officers were assigned to the Narcotics Bureau, they should "not be routinely conducting traffic stops, which is primarily a patrol function." (*Id.*). Baranowski believes that making traffic stops is a "poor use" and/or not a "productive use" of the Narcotics Officers' time. (Docket No. 76; Docket No. 151 at ¶ 3). However, he admitted while testifying that he did not review the City's Narcotics Officers' Handbook to determine if making such stops was a part of the officers' duties.

In addition, Baranowski maintains that conducting traffic stops in plain clothes and an unmarked vehicle, as the officers did in this case, is "unsafe and should only be done in exceptional cases." (Docket No. 76). In his view, plain clothes traffic stops have long been discouraged because they "create [ ] problems" and he insists that "most departments have a policy of allowing only officers in uniform [to] conduct traffic stops for minor violations." (*Id.*). He tes-

tified that he was not aware if the City of Pittsburgh had such a policy, but his opinion was based on his prior experience and the CALEA standards, which discourage the practice of using unmarked vehicles to conduct traffic stops.

He also believes that making traffic stops could expose the officers' identities to potential investigation targets, therefore, limiting their ability to make undercover buys and to operate in a covert manner. (*Id.*). He testified that, based on his experience, random traffic stops were counterproductive because of how undercover officers are typically used in the field. Undercover officers attempt to infiltrate a local drug organization and make drug purchases in a specific area, and then, after making a number of buys, they move to another area to work in order to avoid exposing their identities as police officers. In his view, hundreds of traffic stops of this kind would need to be conducted in order to make a significant drug arrest.

\*3 Baranowski explained that there are safety issues with the stops as well. In his report, he stated that "stops by persons dressed in the manner that narcotic officers would dress to conduct covert investigations could incite violent reactions from persons involved in the drug culture believing that the officers were going to 'rip them off'. This is why all officers are clearly identified as police officers during [a] raid, using various methods of identification including, raid jackets, uniformed police officers and marked police cars." (*Id.*). He explained that these opinions are rooted in "common sense" and his experience. In support of his safety concerns, he testified that he recalled a number of cases during former Governor Bob Casey's tenure where police impersonators pulled over a number of women and committed rapes. He recalled that the practice of using unmarked cars was discouraged within the state police at that time. As to this case, he did not recall Jackson's statement to OMI that when he was pulled over, he "figured [the car] was a plainclothes police car." However, he commented that Jackson's statement indicates that Jackson



Not Reported in F.Supp.2d, 2010 WL 3222137 (W.D.Pa.)  
(Cite as: 2010 WL 3222137 (W.D.Pa.))

was only “assuming” that the car was an undercover vehicle.

Baranowski suggests that the officers in this case could have radioed for a uniformed officer in a marked car to make the stop for them, rather than making the stop themselves. (*Id.*). But, he testified that he was not aware of how the City staffed its officers in the zone where the traffic stop occurred and had no idea if any such uniformed officers were available at the time of the stop at issue in this case.

In his report, Baranowski comments that the officers were “trolling” for drug arrests. He testified similarly. He bases this opinion on his interpretation of Detective Goob's OMI statement that “it's common for us to stop people for any violation, any and all violations, we stop people for, you know.” (*Id.*). Baranowski believes that traffic stops like the one in this case would not yield a high quantity of drug seizures, without good information. He suggests that the officers were “profiling,” or targeting a specific type of vehicle and/or driver prior to making the traffic stops, but testified that he was assuming that a profile was used. He further explained that while the use of a profile is common in law enforcement and not necessarily illegal,<sup>FN4</sup> the use of certain profiles, including racial profiles, have been found unconstitutional by the courts. He admitted in both his report and while testifying that he had not reviewed the traffic arrest records for any of the officers and that this type of information would be helpful to determine the success rate of the profiling and/or these types of traffic stops. Indeed, he commented in his report that “it would be interesting to review the traffic arrests of the officers involved in this incident, to determine whether or not it can be substantiated that these officers always enforce the traffic laws as indicated.” (*Id.*).

FN4. As an example, he cited an officer on traffic duty profiling red sports cars for speeding violations.

## ii. *Initial Encounter*

\*4 As to the initial encounter with police after the traffic stop was effectuated, Baranowski accepts Jackson's statement to OMI that he invoked his Fifth Amendment right to remain silent and made no statements to police. (Docket No. 76). He then explains that “[u]nder the Pennsylvania Vehicle Code, municipal police officers do not have the authority to take a Pennsylvania resident into custody for minor traffic violations.” (*Id.*). He admitted that a non-Pennsylvania resident without a license could be detained for traffic violations. He also opined that an officer cannot cite a person for a “violation of suspended drivers license” until information regarding the person's driving record received from PennDot is verified and a certified copy of the driving history is obtained. (*Id.*). He testified that PennDot is not operational 24 hours per day. In his view, and given the time of the incident in this case (around 9:00 p.m. or 10:00 p.m.), the officers “would not have been able to obtain these documents immediately and, therefore, the argument can be made that Mr. Jackson would have been free to leave the area.” (*Id.*). Baranowski testified that the officers should have permitted Jackson to drive away and, if the officers sometime thereafter received verification from PennDot that Jackson's license was suspended, sent him a citation for driving with a suspended license in the mail.

Baranowski also commented on the merit of the charges against Jackson. In his report, he claims that “no evidence of a crime was ever discovered.” (*Id.*). In his affidavit, Baranowski states that “Jackson was stopped for a minor traffic violation and ultimately convicted of a minor traffic violation” and that the other charges against him, including the disorderly conduct charge, were dismissed. (Docket No. 151 at ¶ 5). He then “assumes” that the charges were “without merit.” (*Id.*). He posits that the officers “could not prove” that Jackson was operating a vehicle without a license and should not have assumed that his license was suspended. (*Id.*).

Not Reported in F.Supp.2d, 2010 WL 3222137 (W.D.Pa.)  
(Cite as: 2010 WL 3222137 (W.D.Pa.))

iii. *Plaintiff's Request to Move Car/ Defendants' Tow Policy Violation*

Baranowski next accepts Jackson's statement that he later asked to be permitted to move his car off the roadway, so that it would not have to be towed. (Docket No. 76). Baranowski believes that this request "could have easily been granted." (*Id.*). He explains that there were several parking lots and cross streets in close proximity to the location of the traffic stop where the vehicle could have been moved and that, if the officers did not believe that Jackson should be permitted to move the car, he (Jackson) should have been permitted to contact his father or another family member to move the car or he could have requested that one of the police officers move the car. (*Id.*). Baranowski opines that there was "no reason to tow the vehicle" because it was registered in Ohio and "there was no proof that Mr. Jackson didn't have a valid license." (*Id.*). Finally, Baranowski concludes that the denial of Jackson's request to have his car moved rather than towed was a violation of Pittsburgh Bureau of Police regulations, Order # 41-4, sections 1.1, 5.1 and 8.1. (*Id.*).

\*5 In his affidavit, Baranowski further states that the City regulations do not grant the officers any discretion when towing vehicles, but give detained drivers like Jackson discretion to request that his car be moved to an area rather than be towed. (Docket No. 151 at ¶ 6).

iv. *Custodial Inventory Search*

As to the custodial inventory, Baranowski states that a "custodial inventory is completed for the purpose of protecting and securing items of value inside the vehicle for the owner and to protect the police department and police officer from claims of malfeasance." (Docket No. 76). He also notes that for a custodial inventory to be valid, "there must be a written policy" of the police department requiring same and that the results of the search must be properly documented. (*Id.*). Baranowski concludes

that "in no circumstances can a custodial inventory be used in lieu of a search warrant or consent to search the vehicle for evidence." (*Id.*).

v. *Use of Force*

Baranowski testified that the force used by the officers in this case was unnecessary and unwarranted and this opinion was based on his personal experience in such situations, his experience teaching, and his consideration of the City's Use of Force policy, the Continuum of Control and the CALEA standards. He testified that the City's Use of Force policy is in accord with the CALEA standards, although the City is not accredited by CALEA.

Baranowski admitted that many of the underlying facts are disputed in this case. But, he testified that he considered the "totality of the circumstances" and all of the evidence presented to him. Where necessary, he "married up" the facts, i.e., accepted certain facts and rejected others. He explained that he needed to weigh the facts in order to fully evaluate the case and that this was a practice/procedure that he typically used when conducting an internal evaluation of use of force cases when he was with the state police. He also considered the credibility of the parties, particularly Jackson's former involvement with law enforcement and the number of excessive force complaints filed against Detective Kreger when he was with the City Police Department. However, Baranowski testified that he did not wholly adopt Jackson's version of this encounter, but adopted some facts from the officers' version as well.

Turning to his opinions, Baranowski accepts the facts that during the custodial inventory of Jackson's car, Jackson asserted a desire to leave, that Jackson approached Detective Kreger, who was located at the driver's door, that Detective Kreger sensed Jackson approaching him, turned to confront him, and then, a confrontation occurred. (*Id.*).

Not Reported in F.Supp.2d, 2010 WL 3222137 (W.D.Pa.)  
(Cite as: 2010 WL 3222137 (W.D.Pa.))

First, Baranowski opined that, contrary to the officers' testimony, he did not believe that Jackson approached Detective Kreger aggressively, menacingly, or with any evil intent. In his report, he explained that "[i]t is hard to imagine that anyone, but especially someone who like Mr. Jackson has had previous contact with police officers would approach a police officer in a menacing manner, while three other officers were standing by." (Docket No. 76). He also felt that "[i]t is a foregone conclusion that Mr. Jackson would not be successful in attacking Detective Kreger in these circumstances." (*Id.*). In Baranowski's opinion, "[i]t is far more likely that Mr. Jackson approached Detective Kreger to obtain something out of his car or his house keys and Detective Kreger overreacted, setting into motion the use of force in this matter." (*Id.*). He offers a number of additional assertions regarding this encounter:

\*6 "In any event, there is no reason for Mr. Jackson to attack Detective Kreger, Jackson was not under arrest and had already invoked his right to leave."

"Mr. Jackson for all intent and purpose is out of there, but he stops to attack Kreger?"

"If Jackson is so incensed over the towing of his vehicle, why does he not attack one of the other police officers who were standing near Jackson?"

"Further, the identity of Mr. Jackson is known to the officers and his vehicle is in police custody at this point. Mr. Jackson has no opportunity to be successful in attacking one of the police officers involved in this incident and no opportunity of getting away with it."

"Mr. Jackson is in a no-win situation by attacking a police officer and quite frankly this scenario just doesn't ring true."

(Docket No. 76).

Baranowski expanded on these initial assertions while testifying. He explained that based on his experience and the location of the individuals at the time, with the car pulled over on the side of a two lane road, where Detective Kreger was conducting an inventory search from the driver's seat of the car with his back turned and the car door opened toward traffic, and Jackson and the three other officers at the rear of the car, that the officers should have handled the situation differently.

In his view, the three officers stationed at the rear of the car near Jackson should not have permitted Jackson to approach Detective Kreger from behind, whether Jackson was agitated or not. He believed that the officers should have intervened between Jackson and Kreger. Since there were three officers present, the officers should have used a swarming technique, i.e., circle around Jackson in order to prevent him from moving in any direction. This technique would involve minimal or no force. He further explained that the officers should not have permitted Jackson to approach on the driver's side of the car, and walk near potentially oncoming traffic for safety reasons.

Under cross-examination, Baranowski conceded that if Jackson aggressively approached Kreger from behind, Kreger would be justified in using a two hand push technique in order to separate them. He admitted that it is important for an officer to maintain space between himself and an approaching individual, both for the safety of the officer and the individual. Baranowski further testified that use of an armbar by an officer to take down an individual who is acting aggressively is an acceptable use of force in many situations. (*See* Docket No. 196 at 7). However, Baranowski testified that striking and kicking an individual who was subdued on the ground was not an acceptable use of force, given the circumstances.

vi. *Baranowski's Conclusion s*



Not Reported in F.Supp.2d, 2010 WL 3222137 (W.D.Pa.)  
(Cite as: 2010 WL 3222137 (W.D.Pa.))

Baranowski concludes that the use of force against Plaintiff was “unnecessary and unwarranted”; “the incident could have been avoided, had the officers followed their department’s regulations”; “the necessity of using force in this matter [was] suspect and [was] created by the actions of the officers involved” and not by Plaintiff; and, because four officers were present, “it should have been unnecessary to use more than a swarming technique” to control Plaintiff, and “it should have been unnecessary to strike or kick him, once he was on the ground.” (*Id.*). In his affidavit, Baranowski states that:

\*7 Mr. Jackson was arrested for Disorderly Conduct, which was later dismissed when he objected to the towing of his vehicle. A person should not be arrested for Disorderly Conduct for voicing concerns to the police. And in fact, there is no evidence that Mr. Jackson’s actions disturbed anyone in the vicinity. Mr. Jackson’s actions resulting in his arrest stem from the police officer’s use of force against him and not from Mr. Jackson’s own actions.

(Docket No. 151 at 7).

### III. DISCUSSION

The use of an expert witness at trial is governed by both the federal procedural and evidentiary rules. Rule 26 of the Federal Rules of Civil Procedure details the discovery procedures for the disclosure of expert witnesses, their reports and matters considered by the expert, while Rule 702 of the Federal Rules of Evidence governs the admissibility of expert opinion testimony at trial.

#### A. Rule 26 Analysis

Baranowski testified that he did not produce all of the matters that he considered to the Defendants in conjunction with his expert report, including the 4th Edition of the CALEA standards (2001), which he referenced several times during his testimony. This is a violation of Rule 26(a)(2)(B), which provides that:

#### (2) Disclosure of Expert Testimony.

(A) In General. In addition to the disclosures required by Rule 26(a)(1), a party must disclose to the other parties the identity of any witness it may use at trial to present evidence under Federal Rule of Evidence 702, 703, or 705.

(B) Written Report. Unless otherwise stipulated or ordered by the court, this disclosure must be accompanied by a written report—prepared and signed by the witness—if the witness is one retained or specially employed to provide expert testimony in the case or one whose duties as the party’s employee regularly involve giving expert testimony. The report must contain:

(I) a complete statement of all opinions the witness will express and the basis and reasons for them;

(ii) *the data or other information considered by the witness in forming them;*

(iii) any exhibits that will be used to summarize or support them;

(iv) the witness’s qualifications, including a list of all publications authored in the previous 10 years;

(v) a list of all other cases in which, during the previous four years, the witness testified as an expert at trial or by deposition; and

(vi) a statement of the compensation to be paid for the study and testimony in the case.

FED.R.CIV.P. 26(a)(2) (emphasis added). A party is also required to supplement expert disclosures made under Rule 26(a)(2) pursuant to Rule 26(e)(2).



Not Reported in F.Supp.2d, 2010 WL 3222137 (W.D.Pa.)  
(Cite as: 2010 WL 3222137 (W.D.Pa.))

FED.R.CIV.P. 26(e). Failure to abide by the disclosure requirements in these provisions is governed by Rule 37(c)(1), which provides that “[i]f a party fails to provide information ... as required by Rule 26(a) or (e), the party is not allowed to use that information ... to supply evidence on a motion, at a hearing, or at a trial, unless the failure was substantially justified or is harmless.” FED.R.CIV.P. 37(c)(1). However, prior to excluding evidence, the United States Court of Appeals for the Third Circuit has held that a district court must consider:

\*8 (1) the prejudice or surprise of the party against whom the excluded evidence would have been admitted;

(2) the ability of the party to cure that prejudice;

(3) the extent to which allowing the evidence would disrupt the orderly and efficient trial of the case or other cases in the court; and

(4) bad faith or wilfulness in failing to comply with a court order or discovery obligation.

*Nicholas v. Pennsylvania State University*, 227 F.3d 133, 148 (3d Cir.2000). In addition, “ ‘the importance of the excluded testimony’ should be considered.” *Konstantopoulos v. Westvaco Corp.*, 112 F.3d 710, 719 (3d Cir.1997) (quoting *Meyers v. Pennypack Woods Home Ownership Ass’n*, 559 F.2d 894, 904 (3d Cir.1977)).

After considering all of these factors, the Court finds that they weigh against striking the proffered testimony that relies on the CALEA standards. First, Defendants have not expressly claimed prejudice related to the untimely disclosure. Secondly, as Plaintiff has pointed out on multiple occasions, they had the opportunity to depose Baranowski during the discovery phase of this case but chose not to do so. Moreover, after the Court determined that a *Daubert* hearing was necessary to resolve Defendants' motion

to exclude Baranowski, they were given the opportunity to cross-examine him. Thus, the prejudice to Defendants is minimal. Thirdly, any such prejudice can be cured by ordering that Plaintiff produce the CALEA standards to the Defendants prior to trial. The CALEA standards are cited in several of the City's Policies. Thus, the Defendants should have some familiarity with these documents, but pretrial disclosure of the specific CALEA standards relied on by Baranowski will enable Defendants to prepare more effective cross examination of him at trial. Finally, there is no evidence that the Rule 26 violation was made in bad faith or that the cited documents were willfully withheld and Baranowski's proffered expert testimony is a significant part of Plaintiff's case.

#### B. Rule 702 Analysis

##### 1. Legal Standard

In their motion, Defendants have challenged the admissibility of proffered expert testimony. Federal Rule of Evidence 702, which memorializes the Supreme Court's landmark case *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 113 S.Ct. 2786, 125 L.Ed.2d 469 (1993), provides the basic framework for the admissibility of expert testimony:

If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise, if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.

FED.R.EVID. 702.<sup>FN5</sup> The United States Court of Appeals for the Third Circuit has held that “Rule 702

Not Reported in F.Supp.2d, 2010 WL 3222137 (W.D.Pa.)  
(Cite as: 2010 WL 3222137 (W.D.Pa.))

embodies a trilogy of restrictions on expert testimony: qualification, reliability and fit.” *Schneider ex rel. Estate of Schneider v. Fried*, 320 F.3d 396, 404 (3d Cir.2003) (citations omitted). “[T]he district court acts as a gatekeeper, preventing opinion testimony that does not meet the requirements of qualification, reliability and fit from reaching the jury.” *Id.* In this role, the district court is not the finder of fact but must focus on the methodology of the expert in order to “satisfy itself that ‘good grounds’ exist for the expert’s opinion.” *United States v. Mitchell*, 365 F.3d 215, 244 (3d Cir.2004) (citing *Daubert*, 509 U.S. at 590, 113 S.Ct. 2786, 125 L.Ed.2d 469). Thus, the district court should not conflate “its gatekeeping function with the fact-finders’ function as the assessor of credibility.” *In re TMI Litigation*, 193 F.3d 613, 713 (3d Cir.1999).

FN5. FED R. EVID. 702 was amended in 2000 in response to *Daubert*, but pre-2000 precedent regarding the *Daubert* analysis also applies to the analysis under Rule 702. See, e.g., *Pineda v. Ford Motor Co.*, 520 F.3d 237, 244 (3d Cir.2008).

\*9 *Daubert* does not require that a party who proffers expert testimony carry the burden of proving to the judge that the expert’s assessment of the situation is correct. As long as an expert’s scientific testimony rests upon “good grounds, based on what is known,” it should be tested by the adversary process—competing expert testimony and active cross-examination—rather than excluded from jurors’ scrutiny for fear that they will not grasp its complexities or satisfactorily weigh its inadequacies. In short, *Daubert* neither requires nor empowers trial courts to determine which of several competing scientific theories has the best provenance. It demands only that the proponent of the evidence show that the expert’s conclusion has been arrived at in a scientifically sound and methodologically reliable fashion.

*Mitchell*, 365 F.3d at 244 (quoting *Ruiz-Troche v. Pepsi Cola Bottling Co.*, 161 F.3d 77, 85 (1st

Cir.1998) (citations omitted)); see also *Kannankeril v. Terminix Intern., Inc.*, 128 F.3d 802, 809 (3d Cir.1997) (“The trial judge must be careful not to mistake credibility questions for admissibility questions.”). The party asserting the admissibility of the proffered testimony has the burden to demonstrate by a preponderance of the evidence that the opinions are based on “good grounds.” *Kannankeril*, 128 F.3d at 807.

In a case such as this, where an expert is proffered to testify regarding non-scientific matters, “[t]he relevant reliability concerns [will] focus upon personal knowledge [and] experience” of the witness and the methodology used will be applying that experience to the facts of the case. *Roberson v. City of Philadelphia*, Civ. A. No. 99-3574, 2001 WL 210294, at \*5, n. 10 (E.D.Pa. Mar.1, 2001) (internal quotation omitted); see also Fed.R.Evid. 702, Advisory Comm. Notes, 2000 Amd. (“when a law enforcement agent testifies regarding the use of code words in a drug transaction, the principle used by the agent is that participants in such transactions regularly use code words to conceal the nature of their activities. The method used by the agent is the application of extensive experience to analyze the meaning of conversations.”); *Champion v. Outlook Nashville, Inc.*, 380 F.3d 893, 907 (6th Cir.2004). As in other contexts, a witness may not testify as an expert outside the scope of his or her expertise—the expert’s qualifications and skills set the boundaries for that expert’s testimony.

Regarding the “fit” element of the analysis, a non-scientific expert “must apply his experience reliably to the facts; his opinions must be well-reasoned, grounded in his experience, and not speculative.” See *Roberson*, 2001 WL 210294, at \*4. Further, a properly qualified non-scientific expert may not offer an opinion as to an ultimate legal issue because to permit this type of evidence would subvert the jury’s function to decide the disputed facts and issues after being properly instructed as to the law by the court. See *Whitmill v. City of Philadelphia*, 29 F.Supp.2d 241,

Not Reported in F.Supp.2d, 2010 WL 3222137 (W.D.Pa.)  
(Cite as: 2010 WL 3222137 (W.D.Pa.))

246 (E.D.Pa.1998) (excluding proffered expert testimony that an interaction with law enforcement “was not a proper *Terry* stop”); *Watkins v. New Castle County*, 374 F.Supp.2d 379, 392–93 (D.Del.2005) (excluding proffered expert testimony that the defendant police officers’ conduct was reckless, willful, indifferent, and that they violated the plaintiff’s constitutional rights); *Roberson*, 2001 WL 210294, at \* 5, n. 10 (excluding proffered expert testimony that an officer’s conduct was “deliberately indifferent” toward the plaintiff). Likewise, non-scientific expert witnesses are not permitted to express opinions as to the credibility of witnesses or of the facts generally. See *Whitmill*, 29 F.Supp.2d at 246–47 (excluding proffered expert testimony discussing the credibility of an officer-defendant). The ultimate inquiry is whether the proffered testimony will “assist the trier of fact to understand the evidence or to determine a fact in issue.” FED.R.CIV.P. 702.

## 2. Trial Issues

\*10 The matter is set for jury selection and trial on August 23, 2010. In their Joint Stipulations, the parties have proffered the following issues to be resolved at said trial:

1. Did the officers have probable cause to arrest the plaintiff and take him into custody for violating Pennsylvania Crimes Code 18 Pa.C.S.A. § 5503 and 5504, Disorderly Conduct and Resisting Arrest?

2. In making the arrest, was the force used by the officers reasonable and necessary?

3. The officers performed a search of the vehicle. It is disputed whether such search was an inventory search or a more invasive search which would require a warrant. If it was an inventory search, did the officers have a lawful basis to conduct an inventory search?

4. Are the Defendant officers entitled to qualified immunity on each of Plaintiff’s claims as they did not

violate the clearly established rights of the Plaintiff and their actions on November 2, 2001, were objectively reasonable?

5. Did the Plaintiff suffer any compensable injuries, and if so, what is the proper measure of damages for such injuries?

6. Are punitive damages to be awarded to the Plaintiff?

(Docket No. 140).

## 3. The Parties’ Arguments

Defendants challenge the foundation of Baranowski’s opinions, arguing that they are unreliable because they are based on unproven or speculative facts. (Docket No. 126). They further maintain that Plaintiff’s proffer of Baranowski is improper because his “opinions” are either not relevant to the issues in dispute at trial, or are not proper expert opinions because they involve statements resolving disputed facts, the resolution of which are within the province of the jury. Defendants concede that if Baranowski had the type of training and experience that he proffers in his report and affidavit, he would have the necessary qualifications to offer an opinion regarding the force used by the officers in this case. However, they do not believe that type of opinion is what has been proffered.

They specifically seek to exclude Baranowski’s opinions that: (1) plain clothes, narcotics officers, such as the Defendants in this case, should not routinely engage in traffic stops because it is not a productive use of their time and can be dangerous when conducted out of uniform; (2) the Defendants were “trolling” or profiling for arrests prior to their stop of Plaintiff’s car; (3) the Defendants acted improperly by arresting Plaintiff and taking him into custody for minor traffic violations <sup>FN6</sup>; (4) the Defendants acted improperly by refusing Plaintiff’s request to call a



Not Reported in F.Supp.2d, 2010 WL 3222137 (W.D.Pa.)  
(Cite as: 2010 WL 3222137 (W.D.Pa.))

family member to pick up his car, rather than to have it towed; and (5) Defendant Kreger's actions in pushing Plaintiff, who approached him from the rear, were not warranted given Baranowski's interpretation of the facts of the case. (Docket No. 127). In later briefing, Defendants further contend that several of Baranowski's opinions are improper legal conclusions and that, ultimately, his use of force opinion is within the understanding of lay jurors, negating the need for expert testimony on the issue of the reasonableness of the force used. (Docket No. 195).

FN6. Defendants contend that Plaintiff was arrested for disorderly conduct resulting from his threatening actions toward them made after the traffic stop. (Docket No. 127).

\*11 In response, Plaintiff maintains that Baranowski's expert report and proffered testimony are sufficient to withstand *Daubert* scrutiny and that any discrepancies should be tested by Defendants during cross-examination. (Docket No. 145). Plaintiff believes that Baranowski is properly qualified and has sufficient personal knowledge and experience regarding all matters raised in his report and later testimony. (Docket No. 197). Plaintiff contends that Baranowski's opinions are critical to his case and that they will assist the jury in resolving the disputed facts in this case. (*Id.*).

#### 4. Analysis of Baranowski's Opinions

With this backdrop, the Court now turns to Defendants' challenge to the proffer of Mr. Baranowski. In this Court's estimation, Baranowski is qualified to offer an expert opinion regarding the use of force by the officers and their application of standardized police procedures in this case as well as the use of force continuum and the proper training for same, based on his experience with the state police, his training and his related teaching experience. Defendants admitted same during the pretrial conference. The methodology used by Baranowski in forming his opinions was to apply his personal knowledge and experience to the

facts of this case. This type of methodology is permitted in the context of expert testimony offered by a non-scientific expert. As noted, Defendants primarily challenge the "reliability" or "fit" of Baranowski's various opinions. They claim that many of his opinions are not relevant to the issues to be tried and that others are based on assumptions and speculation. They further argue that his opinions should be excluded because they are based on a flawed analysis of the facts, including his resolution of disputed factual issues and credibility assessments. The Court will address each of the challenged areas, in turn.

##### i. Traffic Stop

Baranowski's opinions regarding the propriety of the initial traffic stop and the City's alleged misuse of Narcotics Officers, in plain clothes and unmarked vehicles, to make traffic stops are not relevant and are based on improper assumptions and speculation. Thus, these opinions will be excluded at trial. First, the propriety of the traffic stop is not at issue in this case as Plaintiff pled guilty to a summary offense and paid a fine for failing to operate a turn signal. The disputed issues at trial are the reasonableness of the inventory search of Jackson's car, whether there was probable cause to arrest Jackson for disorderly conduct and/or resisting arrest and the reasonableness of the force used against Jackson during the arrest. (Docket No. 140, *Parties' Joint Stipulations* ). Thus, the proffered opinions that the narcotics officers were misused when making traffic stops or that it is unsafe to use undercover officers to make traffic stops are not relevant.

In any event, Jackson recognized that the unmarked vehicle that pulled him over was a police car. Specifically, in his sworn statement to OMI, Jackson stated "I went past Beer World, and I noticed there were lights like in the grill ... of a vehicle, which I figured was a plainclothes police car, pulled over to the right, thinking they're going—like going after someone around me or going somewhere, and they pulled right behind me." (Docket No. 83–2 at 36).

Not Reported in F.Supp.2d, 2010 WL 3222137 (W.D.Pa.)  
(Cite as: 2010 WL 3222137 (W.D.Pa.))

Therefore, the safety concerns articulated by Baranowski simply were not present in this case. Further, as to Baranowski's suggestion that the officers should have radioed for a marked police car to make the stop, Baranowski admitted that he did not know if the City had a policy requiring them to do so, or if there were any marked police cars available in the area that could have made the stop if they had called. Thus, this opinion is without factual support.

\*12 However, even if the traffic stop were in issue, Baranowski would not be permitted to testify regarding his opinions that the officers were "trolling" for drug arrests or "profiling" at the time of the incident. Baranowski admitted that he was assuming that a profile was used by the officers on the date of the arrest but pointed to no evidence in support of this assertion. He relied on a statement by Detective Goob that the officers often make traffic stops when on narcotics duty in support of his opinion that the officers were "trolling" for drug arrests but that term was not used at any point in the record. Baranowski did not review any of the officers' arrest records to determine if his belief that they did not always enforce traffic laws as they asserted was in error. Thus, these opinions are based on improper assumptions and/or speculation and must be excluded. Moreover, the terms "trolling" and "profiling" are prejudicial to Defendants, and the prejudice to them substantially outweighs the limited probative value of Baranowski's use of these terms, given that they have no factual support in the record. *See* FED.R.EVID. 403 ("evidence may be excluded if its probative value is substantially outweighed by the danger of unfair prejudice").

In sum, the proffered expert testimony regarding the traffic stop is not relevant under Rule 403 and, the testimony relying on assumptions and speculation do not "fit" the case, and would not assist the trier of fact under Rule 702.

ii. *Initial Encounter*

Baranowski's opinions as to the initial encounter

between Jackson and the officers after the traffic stop shall be excluded. Based on his experience as a state trooper, Baranowski is arguably qualified to render an opinion as to the proper procedure to be followed after a traffic stop is made. However, his opinions as to how an officer is to determine if a person's license is suspended must be excluded because they are improper legal conclusions and/or without foundation. For instance, he summarizes the law, stating that an officer cannot arrest an individual for violation of traffic laws, but also that an out of state resident can be arrested for violations of traffic laws. He testified to his belief that an individual cannot be arrested for driving with a suspended license without first receiving information from PennDot that the person's license is suspended in the form of a certified copy of the person's driving record. He explained that officers in the field cannot rely on the information that is provided regarding a person's driving history in the computers in their squad cars to determine if a person's license is suspended. The parties dispute the applicable law in this area. Defendants challenged Baranowski on his interpretation of the law at the *Daubert* hearing, but he offered no policy, regulation or statute in support for his opinion. Defendants cited 75 Pa.C.S. § 6309.2 in opposition. The version of that statute in effect on November 2, 2001, provided, in relevant part, that:

\*13 If a person operates a motor vehicle or combination on a highway or trafficway of this Commonwealth while the person's operating privilege is suspended, revoked, canceled, recalled or disqualified, or where the person is unlicensed, as verified by an appropriate law enforcement officer in cooperation with the department, the law enforcement officer shall immobilize the vehicle and the appropriate judicial authority shall be so notified.

75 Pa.C.S. § 6309.2(a)(1) (1996), 1996 July 2, P.L. 535, No. 93, § 5. <sup>FN7</sup> This statute is silent regarding whether a certified copy of a person's driving record is required. Thus, there is no foundation for Baranowski's opinion. Baranowski, a former police



Not Reported in F.Supp.2d, 2010 WL 3222137 (W.D.Pa.)  
(Cite as: 2010 WL 3222137 (W.D.Pa.))

officer, is not qualified to engage in an analysis of the applicable law. Because there is no foundation for this testimony, it must be excluded.

FN7. The present version of this statute provides that:

If a person operates a motor vehicle or combination on a highway or trafficway of this Commonwealth while the person's operating privilege is suspended, revoked, canceled, recalled or disqualified or where the person is unlicensed, as verified by an appropriate law enforcement officer in cooperation with the department, the law enforcement officer shall immobilize the vehicle or combination or, in the interest of public safety, direct that the vehicle be towed and stored by the appropriate towing and storage agent pursuant to subsection (c), and the appropriate judicial authority shall be so notified.

75 Pa.C. S. § 6309.2(a)(1) (2005). In any event, it is unclear whether either version of this statute was adopted by the City of Pittsburgh on the date of the incident. *See Commonwealth v. Henley*, 909 A.2d 352, 361–62 (Pa.Super.2006) (holding that the City of Pittsburgh did not adopt section 6309.2 and “municipalities are only subject to the specific procedures set forth in the statute if they choose to adopt them.”).

iii. *Plaintiff's Request to Move Car/ Defendants' Towing Policy Violation*

Baranowski's opinions regarding the City's Towing Policy and the officers' compliance with same must also be excluded. The relevant policy provides that:

Vehicles of arrested persons shall not be towed

unless:

- the vehicle presents a traffic hazard and cannot be driven away;
- it is necessary for investigative or evidentiary purposes;
- the arrested person may give his permission to another person to move the vehicle;
- the disposition of the vehicle shall be noted on the police report.

(Docket No. 160–2, D–10, Order # 41–4, § 5.1.). Baranowski's opinions consist of his interpretation of this law and do not rely on his experience with any other towing laws or regulations. His opinions are more akin to legal argument than expert testimony. He testified that the Towing Policy, as written, takes all discretion away from the officers in making a determination regarding whether to tow a vehicle but grants the arrested person, Plaintiff in this instance, the discretion to request that he be able to call another person to come to the scene of the traffic stop and move the car on his behalf. Baranowski then concluded that the officers acted in violation of this policy when they rejected Plaintiff's request to call his father to move the vehicle for him.

In this Court's estimation, Baranowski's analysis is an improper legal conclusion, which subverts both the Court's role in instructing the jury on the law and also the jury's role in resolving the disputed facts. There is also no factual or legal foundation for Baranowski's analysis; the policy is silent regarding the proper procedures to be used in the situation that these officers were presented with on November 2, 2001, i.e., Jackson is pulled over while driving by himself, the officers determine that he has a suspended Pennsylvania license, they determine that the vehicle is blocking traffic and must be towed, and Jackson

Not Reported in F.Supp.2d, 2010 WL 3222137 (W.D.Pa.)  
(Cite as: 2010 WL 3222137 (W.D.Pa.))

requests that he be able to call a third party to move his car rather than have it towed. Accordingly, Baranowski's opinions interpreting the Towing Policy are excluded.

iv. *Custodial Inventory*

\*14 Baranowski's opinions, to the extent that he has offered any, regarding the custodial inventory search are also excluded. In his report, Baranowski purportedly summarizes the law regarding a custodial inventory, and offers no actual opinions regarding how the search itself was conducted by the officers. Likewise, his affidavits and testimony did not address the custodial inventory. Because Baranowski's summary of the law regarding custodial inventories is not offered in support of any actual opinions, any testimony in this regard would serve no purpose other than to confuse the jury. This type of testimony would also invade the Court's duty to charge the jury as to the applicable law. Further, as no opinions on this issue were ever proffered, to the extent that Baranowski attempts to testify regarding the custodial inventory at trial, his opinions will be excluded as a violation of Rule 26 in light of the standards set forth above.

v. *Reasons for the Disposition of the Dismissed Charges*

Baranowski's opinions regarding the reasons for the dismissal of the charges initially brought against Jackson, including resisting arrest and disorderly conduct, are excluded. Like the other matters discussed above, these opinions are also not grounded in fact and are legal conclusions or assumptions and speculation. To that end, Baranowski may not testify to any of the following: that because the charges were dismissed, one can "assume" that the charges were without merit; that no evidence of any crime ever existed; or that the officers did not have sufficient evidence to prove any of the dismissed charges. Moreover, Baranowski does not have expertise in the type of prosecutorial discretion involved in making the decision of whether to prosecute charges against an individual. Further, the Court will charge the jury

regarding the dismissal of the charges consistent with the instruction recommended in the Third Circuit's Model Civil Jury Instructions. *See* 3d Cir. Model Civil Jury Inst., § 4.12.2.

vi. *Use of Force*

Baranowski will be permitted to testify as to the use of force by the police officers in this case. However, his testimony will be limited. Defendants contend that Baranowski's use of force opinions should be excluded because they involve improper credibility assessments and the resolution of disputed facts. The Court agrees that Baranowski is not permitted to make credibility assessments of the witnesses, including the truthfulness of their respective testimony or statements. *See Whitmill*, 29 F.Supp.2d at 246–47. Credibility assessments are left solely for the jury to decide and Baranowski's opinions evaluating the credibility of Jackson given his prior involvement with law enforcement and Detective Kreger in light of the prior complaints against him, will be excluded. *Id.* Baranowski's report and testimony also consist of his resolution of many factual disputes and he admitted that he was acting as a "fact finder" during his analysis. The resolution of factual disputes is likewise within the province of the jury, but "[a]n expert is ... permitted to base his opinion on a particular version of the disputed facts and the weight to be accorded to that opinion is for the jury." *Walker v. Gordon*, 46 Fed.Appx. 691, 695–96 (3d Cir.2002) (not precedential); FED.R.EVID. 702, 2002 Amendments ("The emphasis in the amendment on 'sufficient facts or data' is not intended to authorize a trial court to exclude an expert's testimony on the ground that the court believes one version of the facts and not the other."). Therefore, in this Court's estimation, Baranowski cannot testify in the manner that he has presented in his report. Many of his opinions and statements explain only why he feels certain evidence is more credible than the other evidence. These types of explanations impinge on the jury's function. To this end, given these and the other matters discussed above which are not admissible, Baranowski's report cannot

Not Reported in F.Supp.2d, 2010 WL 3222137 (W.D.Pa.)  
(Cite as: 2010 WL 3222137 (W.D.Pa.))

be presented to the jury as an exhibit as Plaintiff has requested. *See* FED.R.EVID. 703 (“Facts or data that are otherwise inadmissible shall not be disclosed to the jury by the proponent of the opinion or inference unless the court determines that their probative value in assisting the jury to evaluate the expert’s opinion substantially outweighs their prejudicial effect.”); FED.R.EVID. 703, 2000 Amendments Comm. (“Rule 703 has been amended to emphasize that when an expert reasonably relies on inadmissible information to form an opinion or inference, the underlying information is not admissible simply because the opinion or inference is admitted.”). But, Baranowski’s report may be used to impeach him.

\*15 Despite the fact that Baranowski’s presentation of the facts in his report resolves matters left for a jury determination, his opinions can be presented at trial if they are offered in response to properly formulated hypothetical questions. Said hypothetical questions must be founded on facts already in evidence and they must not be phrased in a manner requesting that the expert testify on the ultimate legal issue of whether the force used by the officers was “reasonable.” *See Samples v. City of Atlanta*, 916 F.2d 1548, 1551–52 (11th Cir.1990) (discussing the use of a hypothetical question by a use of force expert in a § 1983 case); *Burger v. Mays*, 176 F.R.D. 153, 157 (E.D.Pa.1997) (holding that use of force expert may testify as to whether an officer’s actions “were in line with standard police procedures,” but prohibiting testimony that the officer’s actions were “unreasonable”); *Tschappat v. Groff*, Civ. A. No. 3:CV–01–2279, 2004 WL 5509087, at \*4 (M.D.Pa. Jun.2, 2004). These opinions can then be tested through cross examination. *See Walker*, 46 Fed. Appx. at 696 (citing *Stecyk v. Bell Helicopter Textron, Inc.*, 295 F.3d 408, 414 (3d Cir.2002)).

Finally, Defendants summarily contend that expert testimony is not needed in this case because the content of Baranowski’s proffered testimony is not “beyond the ken of the average juror.” (Docket No.

195). The Court disagrees. Expert testimony is commonly permitted in use of force cases and given Baranowski’s considerable background and experience in these areas, his proffered testimony, so limited by this opinion, will assist the trier of fact on the disputed issues in this case.

The scope of Baranowski’s permitted testimony is as follows:

- (1) His knowledge, experience and extensive law enforcement background;
- (2) The standardized police procedures at issue in this case, including the City of Pittsburgh’s Use of Force Policy, the Continuum of Control, and the CALEA standards (if the CALEA standards are produced prior to trial as discussed above); and,
- (3) Whether the Defendants’ use of force was in accord with the standardized police procedures given the facts of this case (properly presented to him by way of a hypothetical question).

#### IV. CONCLUSION

For the foregoing reasons, Defendants’ Motion [126] is granted, in part and, denied, in part. An appropriate Order follows.

W.D.Pa.,2010.

Jackson v. City of Pittsburgh, Pa.

Not Reported in F.Supp.2d, 2010 WL 3222137 (W.D.Pa.)

END OF DOCUMENT